Considered 02/11/03 MEC

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=> d que
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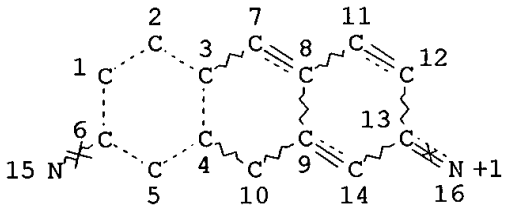


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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  16

STEREO ATTRIBUTES: NONE
L5                  SCR 2040
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L10           698435 SEA FILE=REGISTRY ABB=ON  PLU=ON  3 C6/ESS
L12                 STR
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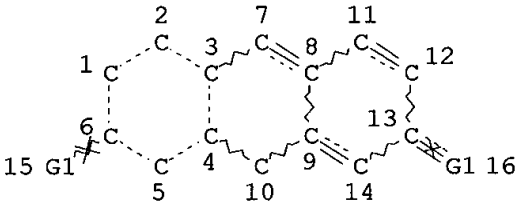


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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  16

STEREO ATTRIBUTES: NONE
L14             244 SEA FILE=REGISTRY SUB=L10 SSS FUL L12
L16             250 SEA FILE=REGISTRY ABB=ON  PLU=ON  L14 OR L7
L17              24 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16


=> d ibib ab hitstr l17 1-24

L17  ANSWER 1 OF 24  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2001:809661  HCAPLUS
DOCUMENT NUMBER:          136:102085
TITLE:                    Spectrothermodynamic Relationship of Cationic vs.
                          Anionic Species Derived from Protonation vs.
```

09/980,531

Deprotonation of Pyrrolo-aza-Aromatic Bases in Homologous Series

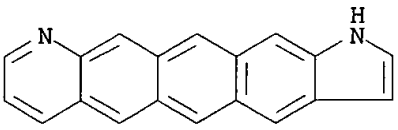
AUTHOR(S): Catalan, J.
CORPORATE SOURCE: Departamento de Quimica Fisica Aplicada, Universidad Autonoma de Madrid, Cantoblanco, Madrid, E-28049, Spain

SOURCE: Journal of the American Chemical Society (2001), 123(48), 11940-11944
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Theor. research on the spectroscopy and protonation energies of ionic species related to the neutral pyrrolo-aza-arom. bases was carried out, using D. Functional Theory (DFT) and its time dependent form (TDDFT). In the ionic species the skeleton localized (+) and (-) charge in the protonated and deprotonated species has a strong perturbation of the .pi.-electronic states. The lowest electronic S0 .fwdarw. S1 (.pi.,.pi.*) transitions have near-coincidence for each cation and anion for the whole homologous series, in agreement with the Valle-Kasha-Catalan rule previously stated. Further simultaneous dramatic changes, upon electronic excitation, in acidity and basicity at the pyrrolo- and aza-positions of the mol. skeleton are the driving force for the biprotonic phototransfer processes in these bases. This constitutes confirmation of the proton-transfer rather than H-atom transfer as the reaction mechanism.

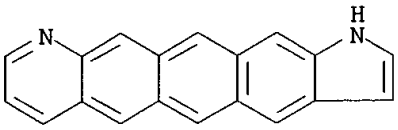
IT **304856-18-6**
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(phototautomerization mechanism; spectrothermodynamic relationship of cationic vs. anionic species derived from protonation vs. deprotonation of pyrrolo-aza-arom. bases in homologous series)

RN 304856-18-6 HCAPLUS
CN 1H-Pyrrolo[2',3':6,7]naphtho[2,3-g]quinoline (9CI) (CA INDEX NAME)



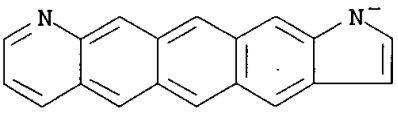
IT **388633-83-8 388633-84-9**
RL: PRP (Properties)
(spectrothermodynamic relationship of cationic vs. anionic species derived from protonation vs. deprotonation of pyrrolo-aza-arom. bases in homologous series)

RN 388633-83-8 HCAPLUS
CN 1H-Pyrrolo[2',3':6,7]naphtho[2,3-g]quinoline, conjugate monoacid (9CI) (CA INDEX NAME)



● H^+

RN 388633-84-9 HCAPLUS
CN 1H-Pyrrolo[2',3':6,7]naphtho[2,3-g]quinoline, ion(1-) (9CI) (CA INDEX NAME)



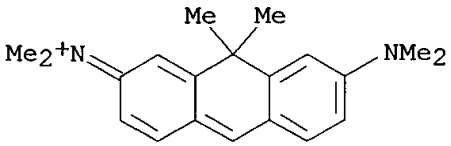
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:686894 HCAPLUS
DOCUMENT NUMBER: 136:20954
TITLE: New fluorescent markers for the red region
AUTHOR(S): Arden-Jacob, J.; Frantzeskos, J.; Kemnitzer, N. U.; Zilles, A.; Drexhage, K. H.
CORPORATE SOURCE: Department of Chemistry, University of Siegen, Siegen, 57068, Germany
SOURCE: Spectrochimica Acta, Part A: Molecular and Biomolecular Spectroscopy (2001), 57A(11), 2271-2283
CODEN: SAMCAS; ISSN: 1386-1425
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

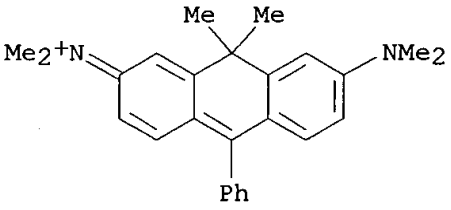
AB Two new classes of fluorescent dyes have been developed as labels for the red region of the spectrum: amide-bridged benzopyrylium dyes and carbopyronine dyes. The fluorescence quantum yield ranges from 20 to 90%, the decay time from 1 to 4 ns. The pH- and solvent-dependence of absorption and fluorescence are described in detail. Covalent attachment is possible via activated carboxyl groups.

IT **17717-35-0 17717-41-8 32364-61-7**
303952-50-3 303952-53-6 303952-56-9
303952-64-9 303952-65-0 303952-67-2
378786-80-2 378786-81-3 378786-82-4
378786-83-5 378786-84-6 378786-85-7
378786-86-8
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(dye; fluorescent markers for red region)

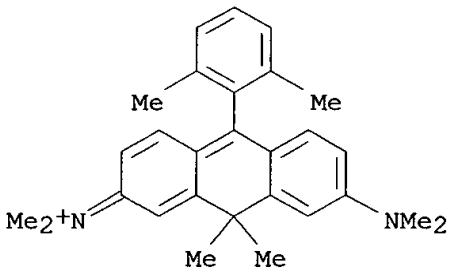
RN 17717-35-0 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



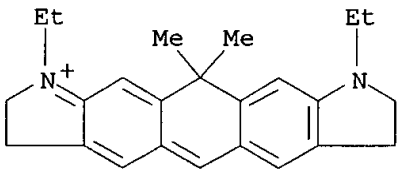
RN 17717-41-8 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-10-phenyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



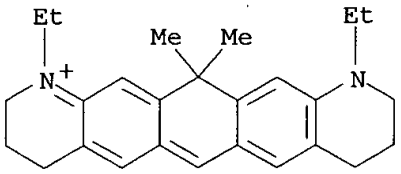
RN 32364-61-7 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-10-(2,6-dimethylphenyl)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



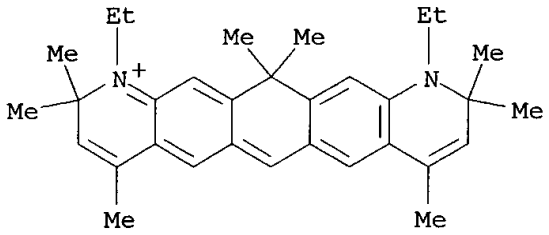
RN 303952-50-3 HCAPLUS
CN Benzo[1,2-f:5,4-f']diindolium, 1,9-diethyl-1,2,3,7,8,11-hexahydro-11,11-dimethyl- (9CI) (CA INDEX NAME)



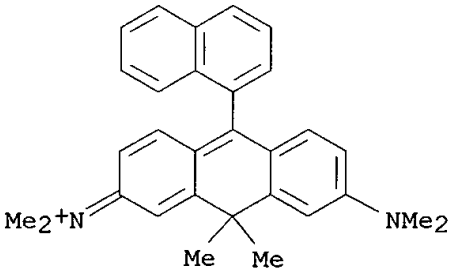
RN 303952-53-6 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 1,11-diethyl-2,3,4,8,9,10,11,13-octahydro-13,13-dimethyl- (9CI) (CA INDEX NAME)



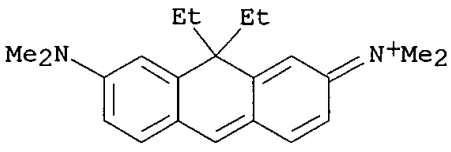
RN 303952-56-9 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 1,11-diethyl-2,10,11,13-tetrahydro-2,2,4,8,10,10,13,13-octamethyl- (9CI) (CA INDEX NAME)



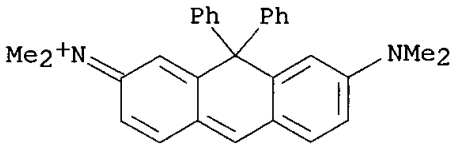
RN 303952-64-9 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-10-(1-naphthalenyl)-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



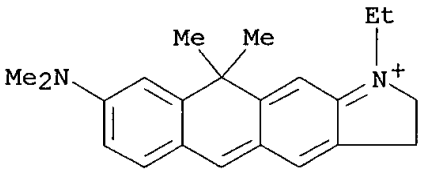
RN 303952-65-0 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-diethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



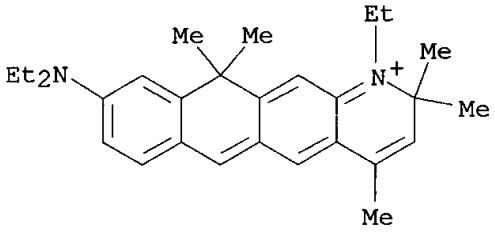
RN 303952-67-2 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-diphenyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



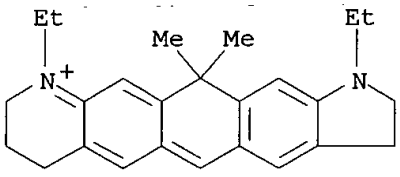
RN 378786-80-2 HCAPLUS
CN 2H-Naphth[2,3-f]indolium, 8-(dimethylamino)-1-ethyl-3,10-dihydro-10,10-dimethyl- (9CI) (CA INDEX NAME)



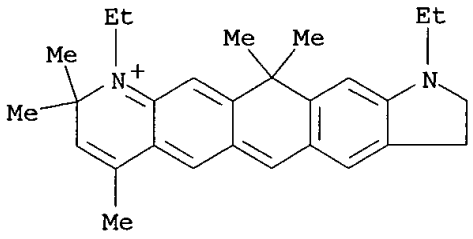
RN 378786-81-3 HCAPLUS
CN Naphtho[2,3-g]quinolinium, 9-(diethylamino)-1-ethyl-2,11-dihydro-2,2,4,11,11-pentamethyl- (9CI) (CA INDEX NAME)



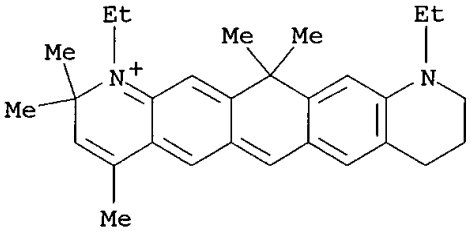
RN 378786-82-4 HCAPLUS
CN 1H-Pyrrolo[2',3':6,7]naphtho[2,3-g]quinolinium, 1,10-diethyl-2,3,7,8,9,12-hexahydro-12,12-dimethyl- (9CI) (CA INDEX NAME)



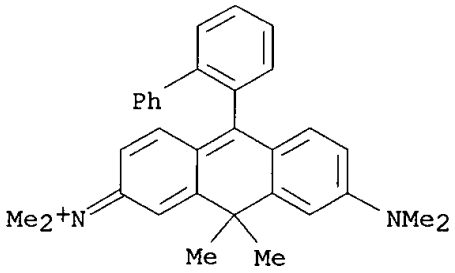
RN 378786-83-5 HCAPLUS
CN 1H-Pyrrolo[2',3':6,7]naphtho[2,3-g]quinolinium, 1,10-diethyl-2,3,9,12-tetrahydro-7,9,9,12,12-pentamethyl- (9CI) (CA INDEX NAME)



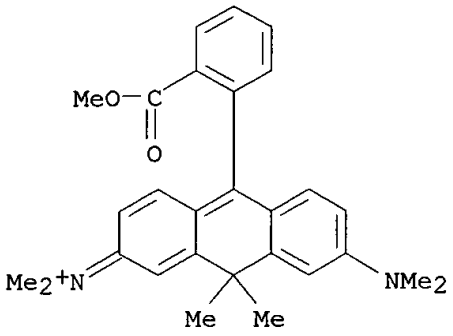
RN 378786-84-6 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 1,11-diethyl-1,2,3,4,10,13-hexahydro-8,10,10,13,13-pentamethyl- (9CI) (CA INDEX NAME)



RN 378786-85-7 HCAPLUS
CN Methanaminium, N-[10-[1,1'-biphenyl]-2-yl-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



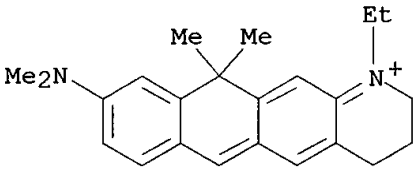
RN 378786-86-8 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-10-[2-(methoxycarbonyl)phenyl]-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



IT **378786-79-9P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye; prepn. of fluorescent markers for red region)
RN 378786-79-9 HCAPLUS
CN Naphtho[2,3-g]quinolinium, 9-(dimethylamino)-1-ethyl-2,3,4,11-tetrahydro-11,11-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

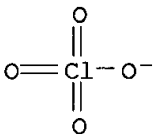
CM 1

CRN 378786-78-8
CMF C23 H29 N2



CM 2

CRN 14797-73-0
CMF Cl O4



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

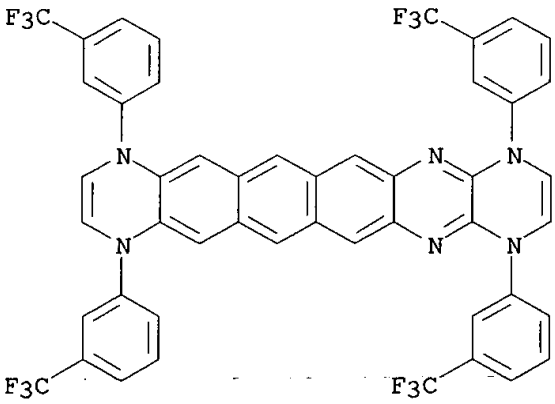
L17 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:825268 HCAPLUS
DOCUMENT NUMBER: 134:147568
TITLE: A short and efficient synthesis of pyrazino-fused

tetraazafulvalenes
AUTHOR(S): Kapplinger, Christian; Beckert, Rainer
CORPORATE SOURCE: Institut fur Organische und Makromolekulare Chemie, Friedrich-Schiller-Universitat Jena, Jena, D-07743, Germany
SOURCE: Synlett (2000), (11), 1679-1681
CODEN: SYNLES; ISSN: 0936-5214
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The tetraazafulvalenes I (R = 3-CF3C6H4, 3,5-[Me(CH2)7O2C]2C6H3, 4-IC6H4) are easily transformed into the corresponding pyrazino-fused derivs. via cyclization of both vicinal secondary arylamino functions with ClCH2CH(OEt)2. Similarly, in the course of a complex reaction, EtCH(OEt)2, PhCH2CH(OEt)2, EtCPh(OEt)2, and PhCH2CPh(OEt)2 lead to deeply blue colored ring fused products. This easily feasible annulation reaction is applicable to other heterocycles which contain a comparable bis-amidine substructure as exemplified for 2,3-bis[arylamino]quinoxalines.

IT **324011-31-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of pyrazino-fused tetraazafulvalenes)

RN 324011-31-6 HCAPLUS
CN Pyrazino[2,3-b]pyrazino[2',3':6,7]naphtho[2,3-g]quinoxaline, 1,4,9,12-tetrahydro-1,4,9,12-tetrakis[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:772710 HCAPLUS
DOCUMENT NUMBER: 133:336553
TITLE: Carbopyronine fluorescent dyes, their production and their use as markers for biological compounds
INVENTOR(S): Drexhage, Karl-Heinz; Arden-Jacob, Jutta; Frantzeskos, Jorg; Zilles, Alexander
PATENT ASSIGNEE(S): Germany
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064986	A1	20001102	WO 2000-EP3568	20000419
W: AU, CA, CN, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19919119	A1	20001102	DE 1999-19919119	19990427
EP 1173519	A1	20020123	EP 2000-922654	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002543233	T2	20021217	JP 2000-614327	20000419

PRIORITY APPLN. INFO.: DE 1999-19919119 A 19990427
WO 2000-EP3568 W 20000419

His application

OTHER SOURCE(S): CASREACT 133:336553; MARPAT 133:336553

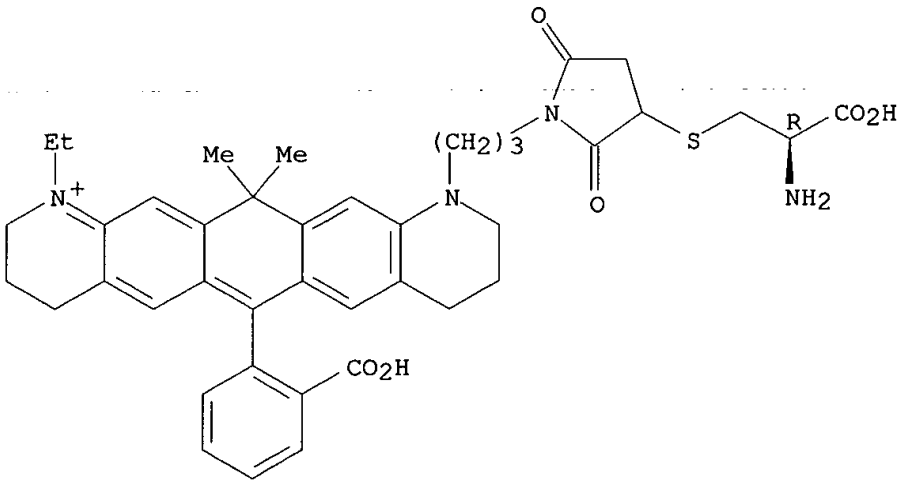
AB The invention relates to carbopyronine fluorescent dyes ((I; R1, R2, R3, R4, R5, R6, R7 = H, halogen, hydroxy, amino, sulfo, carboxy, aldehyde, C.ltoreq.20-org. group, or adjacent substituents may combine to form annelated rings; R8, R13 = C.ltoreq.20-org. group, or together may form a ring system; R9, R10, R11, R12 = H, C.ltoreq.20-org. group, or adjacent substituents may form ring systems; X- = anion) which are prepd. for use as biol. markers. I are site-specific and readily applied to immunochem. and nucleic acid hybridization processes.

IT **303952-91-2P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(cysteine conjugate; carbopyronine fluorescent dye markers for biol. compds.)

RN 303952-91-2 HCAPLUS

CN Benzo[1,2-g:5,4-g']diquinolinium, 11-[3-[3-[[(2R)-2-amino-2-carboxyethyl]thio]-2,5-dioxo-1-pyrrolidinyl]propyl]-6-(2-carboxyphenyl)-1-ethyl-2,3,4,8,9,10,11,13-octahydro-13,13-dimethyl- (9CI) (CA INDEX NAME)

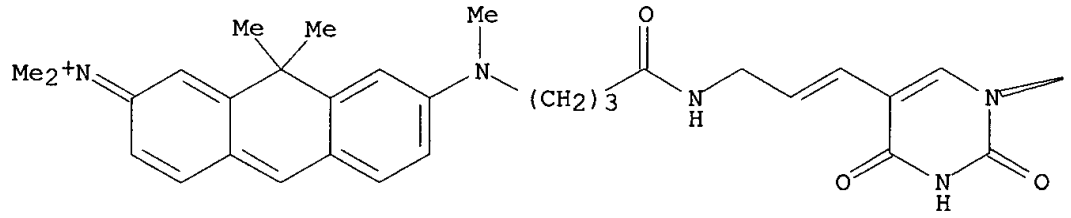
Absolute stereochemistry.



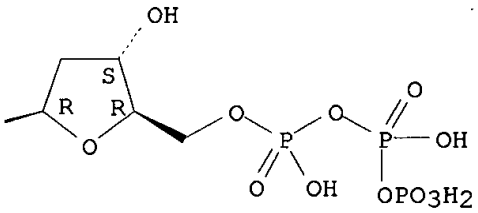
IT **303952-92-3P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(dUTP conjugate; carbopyronine fluorescent dye markers for biol. compds.)
RN 303952-92-3 HCAPLUS
CN Uridine 5'-(tetrahydrogen triphosphate), 2'-deoxy-5-[3-[[4-[[7-(dimethyliminio)-7,9-dihydro-9,9-dimethyl-2-anthracenyl]methylamino]-1-oxobutyl]amino]-1-propenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

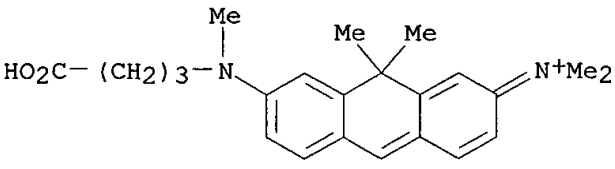
PAGE 1-A



PAGE 1-B

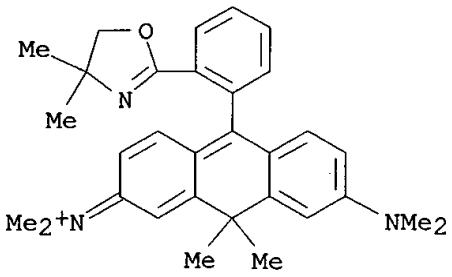


IT **303952-37-6P 303952-63-8P 303952-68-3P**
303952-69-4P
RL: BSU (Biological study, unclassified); IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(dye; carbopyronine fluorescent dye markers for biol. compds.)
RN 303952-37-6 HCAPLUS
CN Methanaminium, N-[7-[(3-carboxypropyl)methylamino]-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)

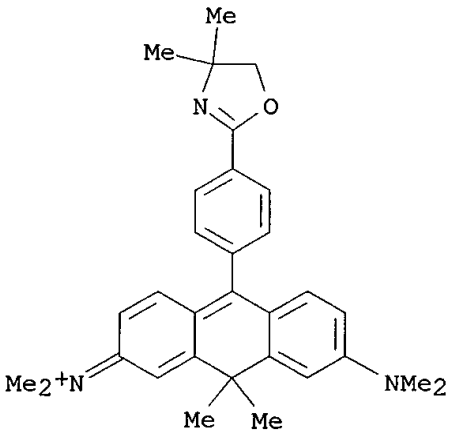


RN 303952-63-8 HCAPLUS

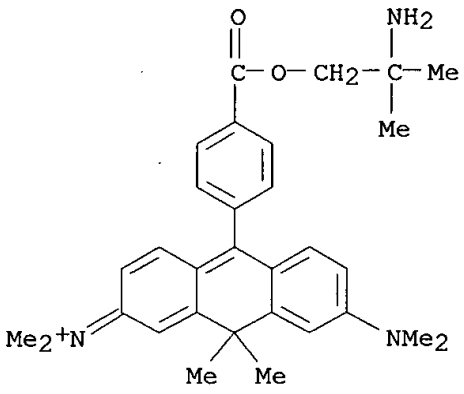
CN Methanaminium, N-[10-[2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)phenyl]-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



RN 303952-68-3 HCAPLUS
CN Methanaminium, N-[10-[4-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)phenyl]-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)

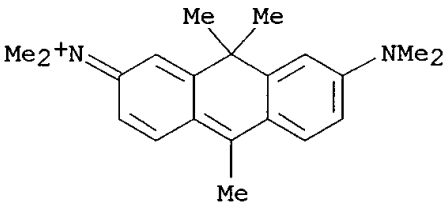


RN 303952-69-4 HCAPLUS
CN Methanaminium, N-[10-[4-[(2-amino-2-methylpropoxy)carbonyl]phenyl]-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)

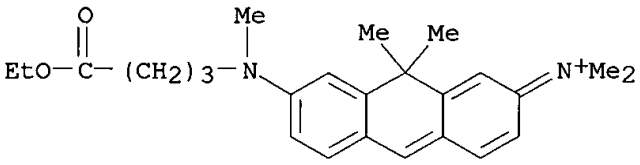


IT **17717-51-0P 303952-36-5P 303952-39-8P**
303952-40-1P 303952-48-9P 303952-49-0P
303952-59-2P 303952-67-2P 303952-70-7P
303952-73-0P 303952-74-1P 303952-79-6P
RL: BSU (Biological study, unclassified); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(dye; carbopyronine fluorescent dye markers for biol. compds.)

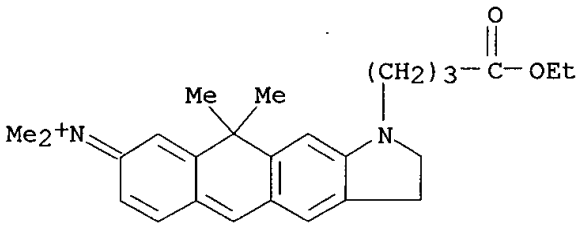
RN 17717-51-0 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9,10-trimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



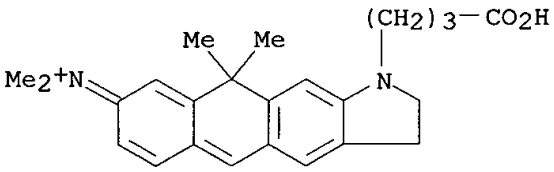
RN 303952-36-5 HCAPLUS
CN Methanaminium, N-[7-[(4-ethoxy-4-oxobutyl)methylamino]-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



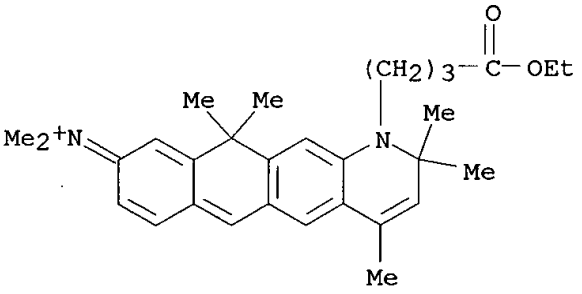
RN 303952-39-8 HCAPLUS
CN Methanaminium, N-[1-(4-ethoxy-4-oxobutyl)-1,2,3,10-tetrahydro-10,10-dimethyl-8H-naphth[2,3-f]indol-8-ylidene]-N-methyl- (9CI) (CA INDEX NAME)



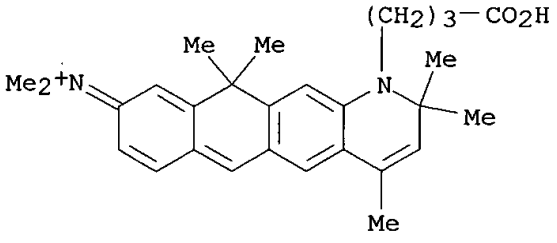
RN 303952-40-1 HCAPLUS
CN Methanaminium, N-[1-(3-carboxypropyl)-1,2,3,10-tetrahydro-10,10-dimethyl-8H-naphth[2,3-f]indol-8-ylidene]-N-methyl- (9CI) (CA INDEX NAME)



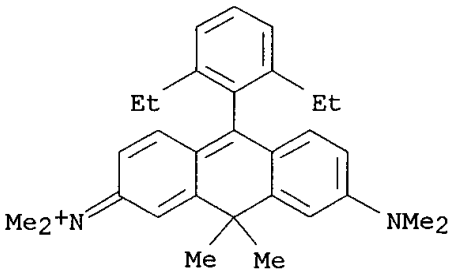
RN 303952-48-9 HCAPLUS
CN Methanaminium, N-[1-(4-ethoxy-4-oxobutyl)-2,11-dihydro-2,2,4,11,11-pentamethylnaphtho[2,3-g]quinolin-9(1H)-ylidene]-N-methyl- (9CI) (CA INDEX NAME)



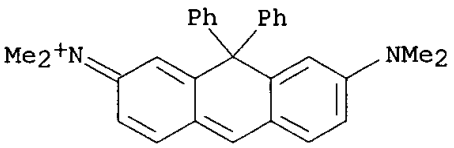
RN 303952-49-0 HCAPLUS
CN Methanaminium, N-[1-(3-carboxypropyl)-2,11-dihydro-2,2,4,11,11-pentamethylnaphtho[2,3-g]quinolin-9(1H)-ylidene]-N-methyl- (9CI) (CA INDEX NAME)



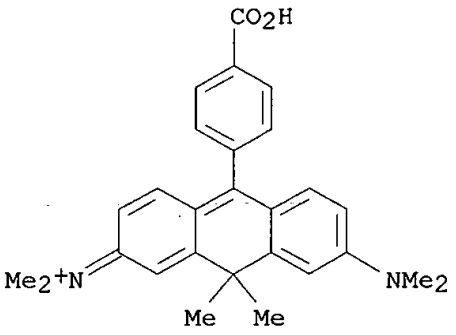
RN 303952-59-2 HCAPLUS
CN Methanaminium, N-[10-(2,6-diethylphenyl)-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



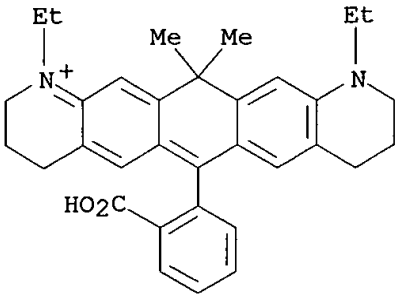
RN 303952-67-2 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-diphenyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



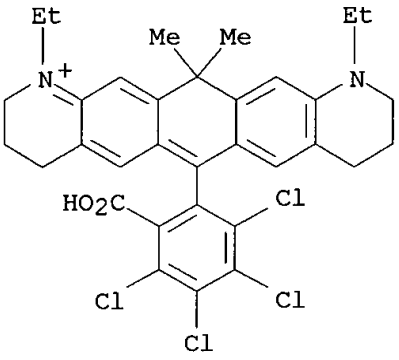
RN 303952-70-7 HCAPLUS
CN Methanaminium, N-[10-(4-carboxyphenyl)-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



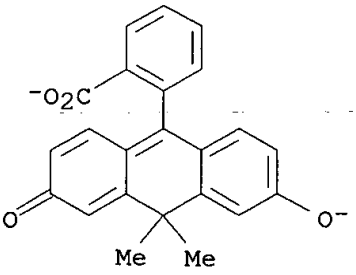
RN 303952-73-0 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 6-(2-carboxyphenyl)-1,11-diethyl-2,3,4,8,9,10,11,13-octahydro-13,13-dimethyl- (9CI) (CA INDEX NAME)



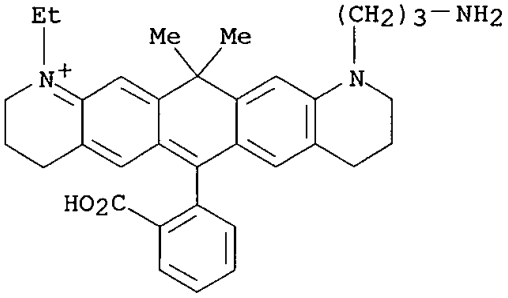
RN 303952-74-1 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 6-(2-carboxy-3,4,5,6-tetrachlorophenyl)-1,11-diethyl-2,3,4,8,9,10,11,13-octahydro-13,13-dimethyl- (9CI) (CA INDEX NAME)



RN 303952-79-6 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-6-hydroxy-10,10-dimethyl-3-oxo-9-anthracenyl)-, ion(2-) (9CI) (CA INDEX NAME)

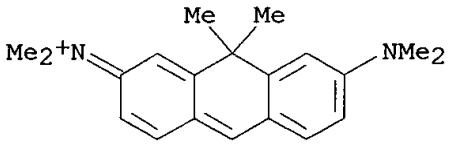


IT **303952-80-9**
RL: BSU (Biological study, unclassified); RCT (Reactant); TEM (Technical or engineered material use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(dye; carbopyronine fluorescent dye markers for biol. compds.)
RN 303952-80-9 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 11-(3-aminopropyl)-6-(2-carboxyphenyl)-1-ethyl-2,3,4,8,9,10,11,13-octahydro-13,13-dimethyl- (9CI) (CA INDEX NAME)

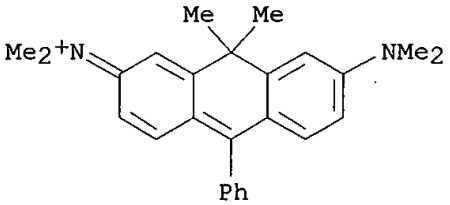


IT **17717-35-0 17717-41-8 32364-61-7**
303952-35-4 303952-38-7 303952-41-2
303952-42-3 303952-43-4 303952-44-5
303952-45-6 303952-46-7 303952-47-8
303952-50-3 303952-51-4 303952-52-5
303952-53-6 303952-54-7 303952-55-8
303952-56-9 303952-57-0 303952-58-1
303952-60-5 303952-61-6 303952-62-7
303952-64-9 303952-65-0 303952-66-1
303952-71-8 303952-72-9 303952-75-2
303952-76-3 303952-77-4 303952-78-5
RL: BSU (Biological study, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(dye; carbopyronine fluorescent dye markers for biol. compds.)

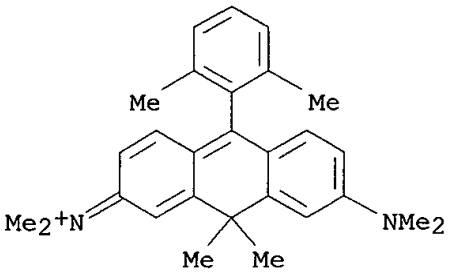
RN 17717-35-0 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



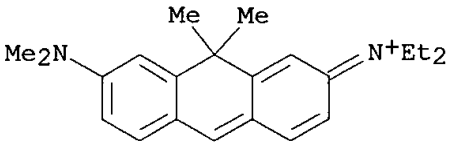
RN 17717-41-8 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-10-phenyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



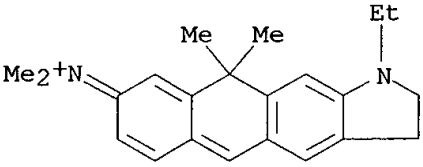
RN 32364-61-7 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-10-(2,6-dimethylphenyl)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



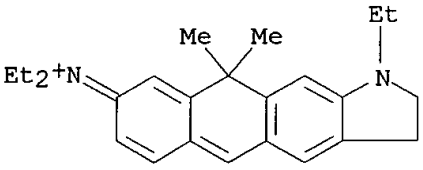
RN 303952-35-4 HCAPLUS
CN Ethanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-ethyl- (9CI) (CA INDEX NAME)



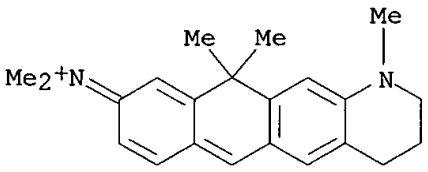
RN 303952-38-7 HCAPLUS
CN Methanaminium, N-(1-ethyl-1,2,3,10-tetrahydro-10,10-dimethyl-8H-naphth[2,3-f]indol-8-ylidene)-N-methyl- (9CI) (CA INDEX NAME)



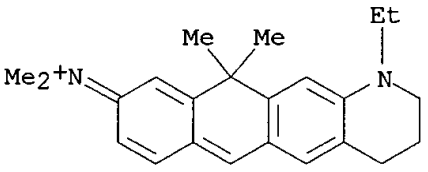
RN 303952-41-2 HCAPLUS
CN Ethanaminium, N-ethyl-N-(1-ethyl-1,2,3,10-tetrahydro-10,10-dimethyl-8H-naphth[2,3-f]indol-8-ylidene)- (9CI) (CA INDEX NAME)



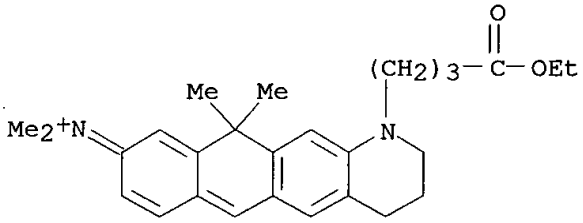
RN 303952-42-3 HCAPLUS
CN Methanaminium, N-methyl-N-(2,3,4,11-tetrahydro-1,11,11-trimethylnaphtho[2,3-g]quinolin-9(1H)-ylidene)- (9CI) (CA INDEX NAME)



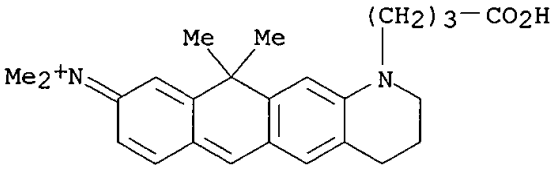
RN 303952-43-4 HCAPLUS
CN Methanaminium, N-(1-ethyl-2,3,4,11-tetrahydro-11,11-dimethylnaphtho[2,3-g]quinolin-9(1H)-ylidene)-N-methyl- (9CI) (CA INDEX NAME)



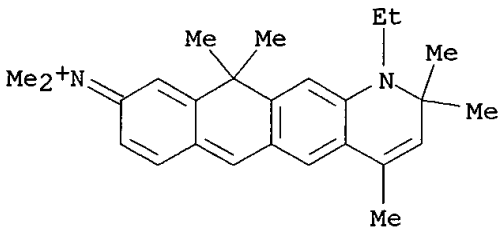
RN 303952-44-5 HCAPLUS
CN Methanaminium, N-[1-(4-ethoxy-4-oxobutyl)-2,3,4,11-tetrahydro-11,11-dimethylnaphtho[2,3-g]quinolin-9(1H)-ylidene]-N-methyl- (9CI) (CA INDEX NAME)



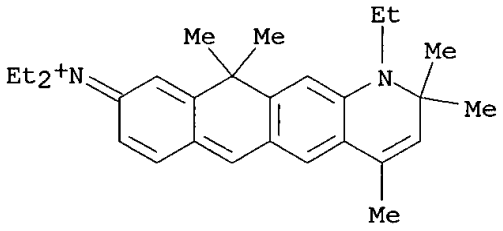
RN 303952-45-6 HCAPLUS
CN Methanaminium, N-[1-(3-carboxypropyl)-2,3,4,11-tetrahydro-11,11-dimethylnaphtho[2,3-g]quinolin-9(1H)-ylidene]-N-methyl- (9CI) (CA INDEX NAME)



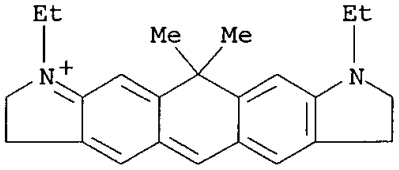
RN 303952-46-7 HCAPLUS
CN Methanaminium, N-(1-ethyl-2,11-dihydro-2,2,4,11,11-pentamethylnaphtho[2,3-g]quinolin-9(1H)-ylidene)-N-methyl- (9CI) (CA INDEX NAME)



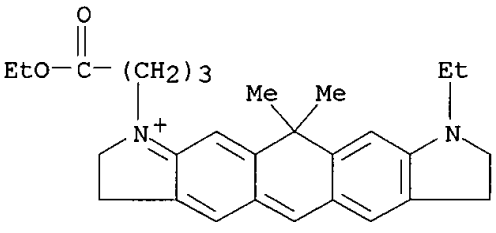
RN 303952-47-8 HCAPLUS
CN Ethanaminium, N-ethyl-N-(1-ethyl-2,11-dihydro-2,2,4,11,11-pentamethylnaphtho[2,3-g]quinolin-9(1H)-ylidene)- (9CI) (CA INDEX NAME)



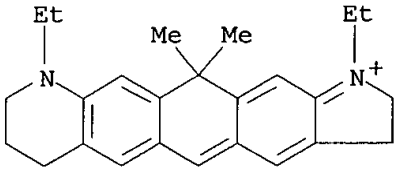
RN 303952-50-3 HCAPLUS
CN Benzo[1,2-f:5,4-f']diindolium, 1,9-diethyl-1,2,3,7,8,11-hexahydro-11,11-dimethyl- (9CI) (CA INDEX NAME)



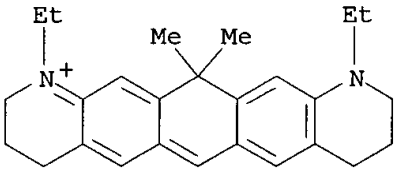
RN 303952-51-4 HCAPLUS
CN Benzo[1,2-f:5,4-f']diindolium, 9-(4-ethoxy-4-oxopropyl)-1-ethyl-1,2,3,7,8,11-hexahydro-11,11-dimethyl- (9CI) (CA INDEX NAME)



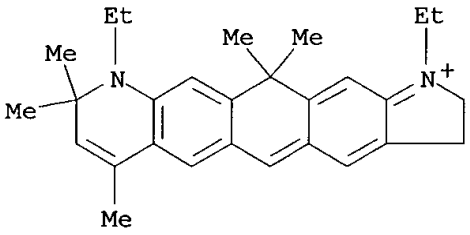
RN 303952-52-5 HCAPLUS
CN 2H-Pyrrolo[2',3':6,7]naphtho[2,3-g]quinolinium, 1,10-diethyl-3,7,8,9,10,12-hexahydro-12,12-dimethyl- (9CI) (CA INDEX NAME)



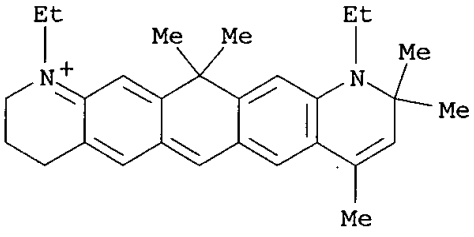
RN 303952-53-6 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 1,11-diethyl-2,3,4,8,9,10,11,13-octahydro-13,13-dimethyl- (9CI) (CA INDEX NAME)



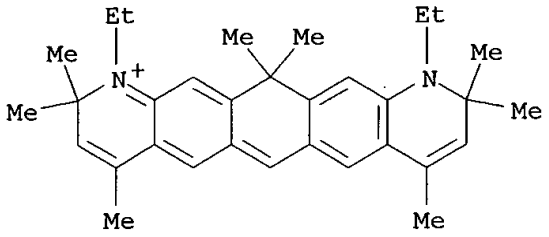
RN 303952-54-7 HCAPLUS
CN 2H-Pyrrolo[2',3':6,7]naphtho[2,3-g]quinolinium, 1,10-diethyl-3,9,10,12-tetrahydro-7,9,9,12,12-pentamethyl- (9CI) (CA INDEX NAME)



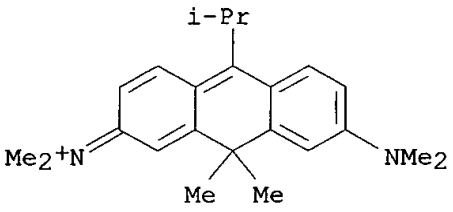
RN 303952-55-8 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 1,11-diethyl-2,3,4,10,11,13-hexahydro-8,10,10,13,13-pentamethyl- (9CI) (CA INDEX NAME)



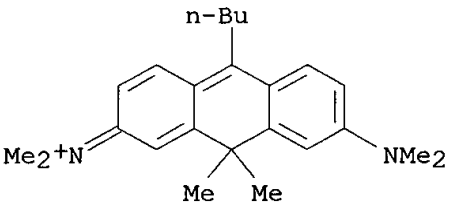
RN 303952-56-9 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 1,11-diethyl-2,10,11,13-tetrahydro-2,2,4,8,10,10,13,13-octamethyl- (9CI) (CA INDEX NAME)



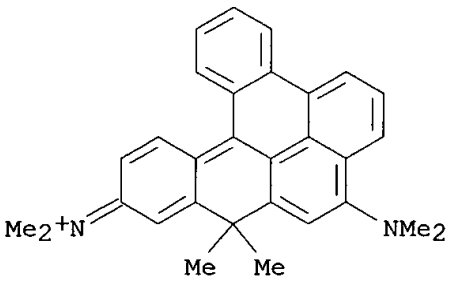
RN 303952-57-0 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-10-(1-methylethyl)-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



RN 303952-58-1 HCAPLUS
CN Methanaminium, N-[10-butyl-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)

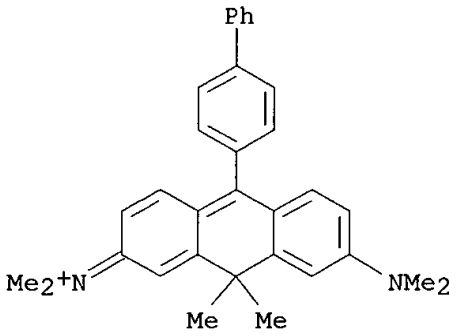


RN 303952-60-5 HCAPLUS
CN Methanaminium, N-[8-(dimethylamino)-10,10-dimethyldibenzo[def,p]chrysen-12(10H)-ylidene]-N-methyl- (9CI) (CA INDEX NAME)

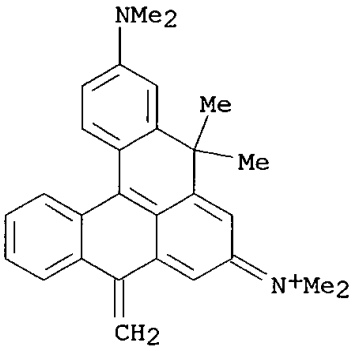


RN 303952-61-6 HCAPLUS
CN Methanaminium, N-[10-[1,1'-biphenyl]-4-yl-7-(dimethylamino)-9,9-dimethyl-

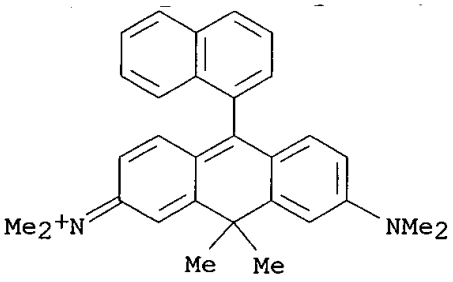
2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



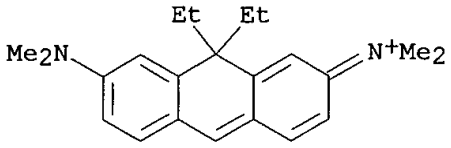
RN 303952-62-7 HCAPLUS
CN Methanaminium, N-[3-(dimethylamino)-5,5-dimethyl-9-methylene-5H-naphth[3,2,1-de]anthracen-7(9H)-ylidene]-N-methyl- (9CI) (CA INDEX NAME)



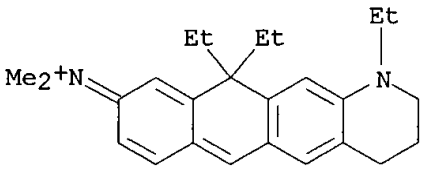
RN 303952-64-9 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-10-(1-naphthalenyl)-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



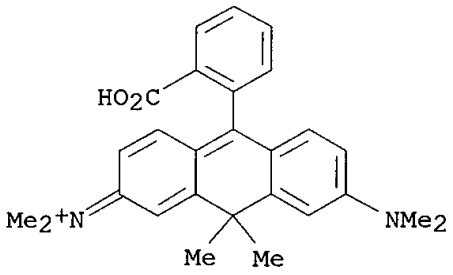
RN 303952-65-0 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-diethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



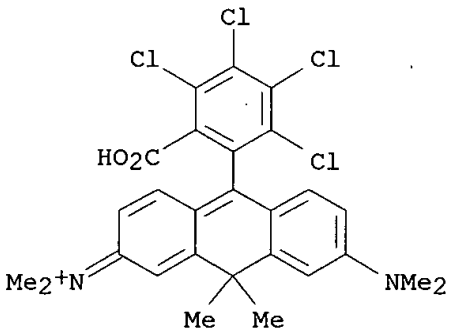
RN 303952-66-1 HCAPLUS
CN Methanaminium, N-methyl-N-(1,11,11-triethyl-2,3,4,11-tetrahydronaphtho[2,3-g]quinolin-9(1H)-ylidene)- (9CI) (CA INDEX NAME)



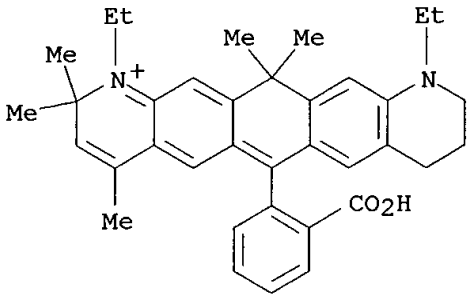
RN 303952-71-8 HCAPLUS
CN Methanaminium, N-[10-(2-carboxyphenyl)-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



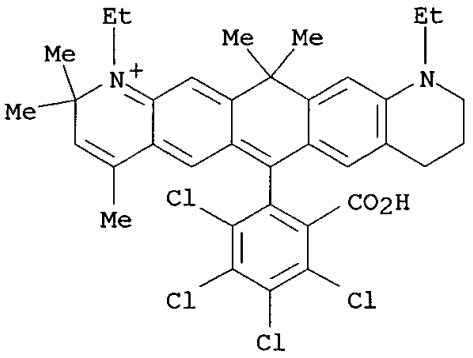
RN 303952-72-9 HCAPLUS
CN Methanaminium, N-[10-(2-carboxy-3,4,5,6-tetrachlorophenyl)-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



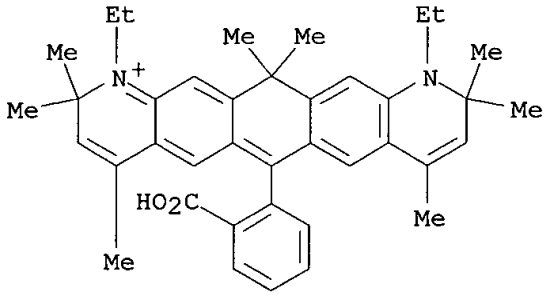
RN 303952-75-2 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 6-(2-carboxyphenyl)-1,11-diethyl-2,8,9,10,11,13-hexahydro-2,2,4,13,13-pentamethyl- (9CI) (CA INDEX NAME)



RN 303952-76-3 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 6-(2-carboxy-3,4,5,6-tetrachlorophenyl)-1,11-diethyl-2,8,9,10,11,13-hexahydro-2,2,4,13,13-pentamethyl- (9CI) (CA INDEX NAME)

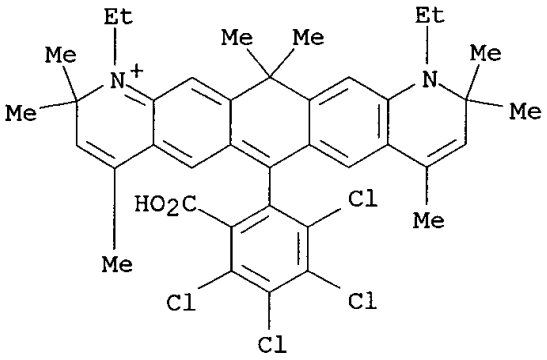


RN 303952-77-4 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 6-(2-carboxyphenyl)-1,11-diethyl-2,10,11,13-tetrahydro-2,2,4,8,10,10,13,13-octamethyl- (9CI) (CA INDEX NAME)



RN 303952-78-5 HCAPLUS
CN Benzo[1,2-g:5,4-g']diquinolinium, 6-(2-carboxy-3,4,5,6-tetrachlorophenyl)-

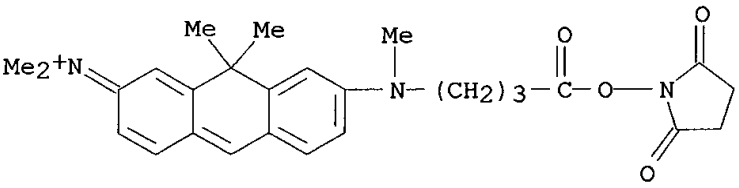
1,11-diethyl-2,10,11,13-tetrahydro-2,2,4,8,10,10,13,13-octamethyl- (9CI) (CA INDEX NAME)



IT **303952-88-7P 303952-89-8P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(intermediate for conjugate formation; carbopyronine fluorescent dye markers for biol. compds.)

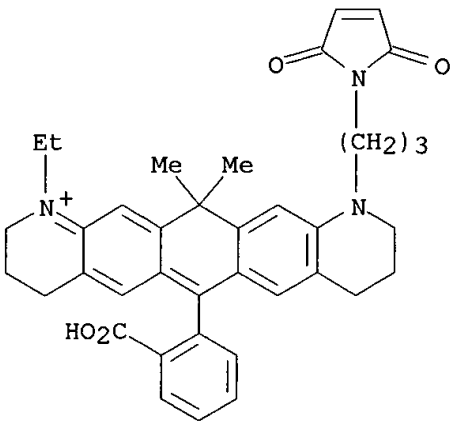
RN 303952-88-7 HCAPLUS

CN Methanaminium, N-[7-[[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]methylamino]-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



RN 303952-89-8 HCAPLUS

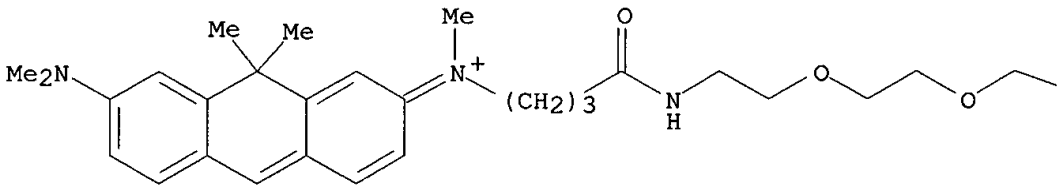
CN Benzo[1,2-g:5,4-g']diquinolinium, 6-(2-carboxyphenyl)-11-[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)propyl]-1-ethyl-2,3,4,8,9,10,11,13-octahydro-13,13-dimethyl- (9CI) (CA INDEX NAME)



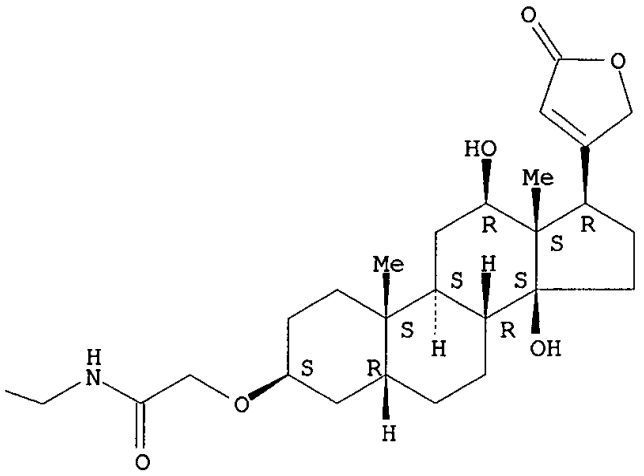
IT **303952-94-5P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(steroid conjugate; carbopyronine fluorescent dye markers for biol. compds.)
RN 303952-94-5 HCAPLUS
CN Card-20(22)-enolide, 3-[[17-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-2,13-dioxo-6,9-dioxa-3,12-diaza-17-azoniaoctadec-1-yl]oxy]-12,14-dihydroxy-, (3.beta.,5.beta.,12.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:296211 HCAPLUS
DOCUMENT NUMBER: 131:46015
TITLE: A kinetic study of the hydrolysis of crystal violet and some terminal and bridged analogues
AUTHOR(S): Beach, Steven F.; Hepworth, John D.; Mason, Donald; Swarbrick, Elizabeth A.
CORPORATE SOURCE: Department of Chemistry, University of Central Lancashire, Preston, PR1 2HE, UK
SOURCE: Dyes and Pigments (1999), 42(1), 71-77
CODEN: DYPIDX; ISSN: 0143-7208
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

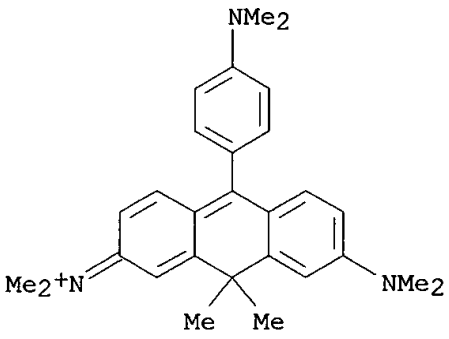
AB Rate consts. have been measured for the reaction of hydroxide ions with crystal violet, ethyl violet, pyrrolidine violet, and the 2,2'-isopropylidene- and oxygen-bridged analogs of crystal violet. The rates of hydrolysis of Et and pyrrolidine violets are similar to each other but are slower than crystal violet in accord with the electron-releasing nature of the terminal groups. Bridging groups also stabilize the dye system. The activation parameters .DELTA.H# and .DELTA.S# have been obtained for each dye.

IT **227462-97-7P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(green dye; prepn. and kinetics of base hydrolysis of)

RN 227462-97-7 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-10-[4-(dimethylamino)phenyl]-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, perchlorate (9CI) (CA INDEX NAME)

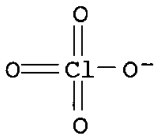
CM 1

CRN 32364-65-1
CMF C28 H34 N3



CM 2

CRN 14797-73-0
CMF Cl O4



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:96854 HCAPLUS
DOCUMENT NUMBER: 130:231619
TITLE: Selective fluorescence derivatization and capillary electrophoretic separation of amidated amino acids
AUTHOR(S): Feng, Lei; Johnson, Mitchell E.
CORPORATE SOURCE: Department of Chemistry and Biochemistry, Duquesne University, Pittsburgh, PA, 15282-1530, USA
SOURCE: Journal of Chromatography, A (1999), 832(1 + 2), 211-224
CODEN: JCRAEY; ISSN: 0021-9673
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

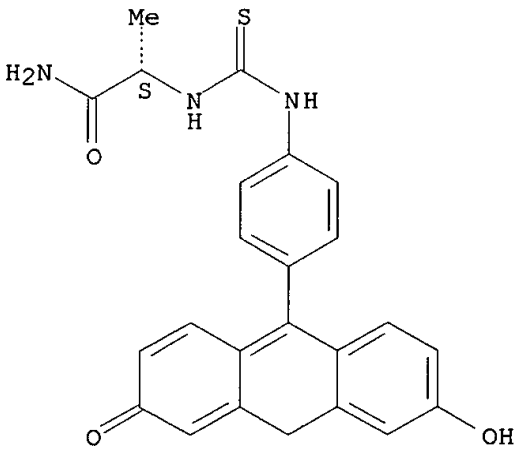
AB Selectively derivatized amide-terminated amino acids were sepd. by micellar electrokinetic capillary chromatog. (MECC). The amides were selectively derivatized by deactivating all primary amines in the sample mixt. by acetylation, converting the amides to primary amines by Hofmann rearrangement, and tagging the resultant amines with fluorescein isothiocyanate (FITC). The fluorescent amide derivs. were detected by confocal laser-induced fluorescence. The use of the MECC mode was mandated by very similar charge and size characteristics of the derivatized amides. Sepn. of 11 amino acid amides was carried out in bare fused silica capillaries in 10 mM borate and 90 mM sodium dodecyl sulfate

buffer in under 15 min. Anal. of dispersion and mobility behavior suggests that hydrophobicity is the primary determinant of micelle/buffer partitioning, and, therefore, mobility; relative hydrophobicity based on values for amino acids is an adequate predictor of elution order for derivs. without charged side-chains. Selectivity of the reaction is .ltoreq.100, perhaps greater; the estn. was limited by ability of FITC to derivatize at low concns. Rearrangement reaction yields and kinetics were found by NMR spectroscopy to depend on side-chain identity. Yields were 80-100% for the rearrangement, and half-lives were 10-30 min for 100 mM solns. of several representative amino acid amides. Reaction products were not purified, for the sake of simplicity, and a no. of impurity peaks appeared in the electropherograms. Because of the high efficiency of the sepn. (optimal plate heights <2 .mu.m), resoln. was usually adequate to mitigate this potential problem.

IT **221199-42-4 221199-48-0 221199-53-7**
RL: PRP (Properties)
(NMR of)

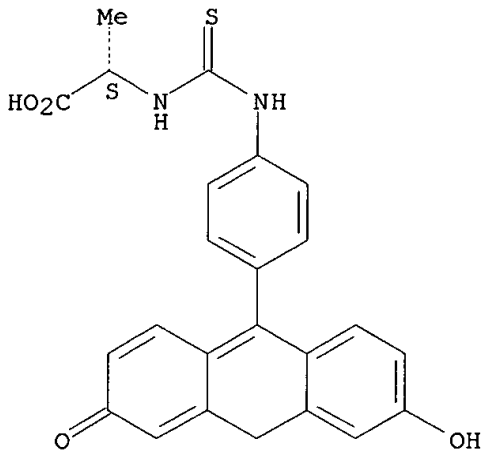
RN 221199-42-4 HCAPLUS
CN Propanamide, 2-[[[[4-(3,10-dihydro-6-hydroxy-3-oxo-9-anthracenyl)phenyl]amino]thioxomethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



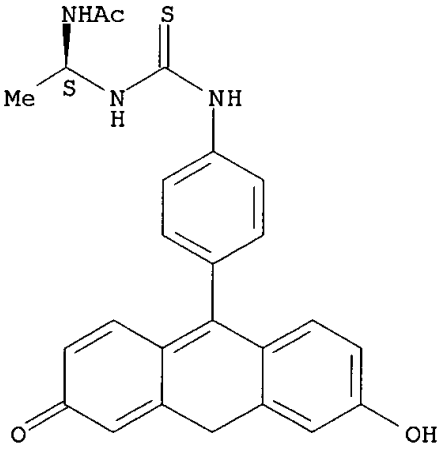
RN 221199-48-0 HCAPLUS
CN L-Alanine, N-[[[4-(3,10-dihydro-6-hydroxy-3-oxo-9-anthracenyl)phenyl]amino]thioxomethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 221199-53-7 HCAPLUS
CN Acetamide, N-[(1S)-1-[[[[4-(3,10-dihydro-6-hydroxy-3-oxo-9-anthracenyl)phenyl]amino]thioxomethyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:803918 HCAPLUS
DOCUMENT NUMBER: 130:59181
TITLE: Light-decolorizable recording material, ink, or toner
INVENTOR(S): Murofushi, Katsumi; Hosada, Yoshikazu
PATENT ASSIGNEE(S): Showa Denko K. K., Japan
SOURCE: U.S., 36 pp., Cont. of U.S. Ser. No. 336,760, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5846682	A	19981208	US 1997-799212	19970213
PRIORITY APPLN. INFO.:			US 1993-24742	19930302
			US 1994-336760	19941108

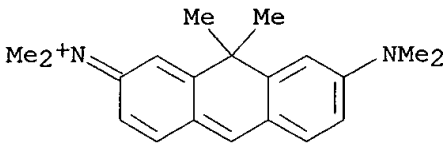
OTHER SOURCE(S): MARPAT 130:59181

AB A light-decolorizable recording material, ink, or toner comprises a colored dye having absorptions in the visible light region and a boron compd. represented by the general formula B-R1R2R3R4 wherein R1-4 each independently represents an alkyl, aryl, allyl, aralkyl, alkenyl, alkynyl, silyl, heterocyclic, substituted alkyl, substituted aryl, substituted allyl, substituted aralkyl, substituted alkenyl, substituted alkynyl, or substituted silyl group, and Z+ represents a quaternary ammonium, quaternary pyridinium, quaternary quinolinium or phosphonium cation.

IT **161031-33-0 217457-31-3**
RL: TEM (Technical or engineered material use); USES (Uses)
(light-bleachable recording materials contg. boron compds. and)

RN 161031-33-0 HCAPLUS

CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, bromide (9CI) (CA INDEX NAME)



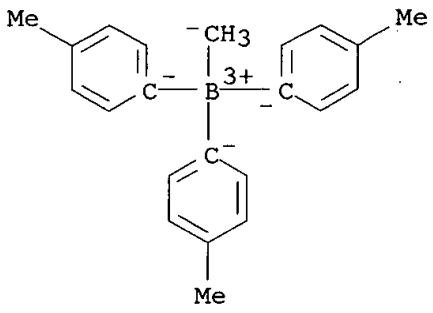
● Br^-

RN 217457-31-3 HCAPLUS

CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, (T-4)-methyltris(4-methylphenyl)borate(1-) (9CI) (CA INDEX NAME)

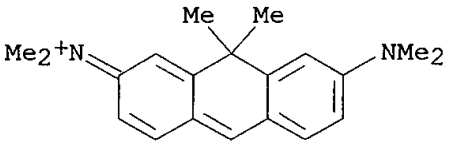
CM 1

CRN 47253-41-8
CMF C22 H24 B
CCI CCS



CM 2

CRN 17717-35-0
CMF C20 H25 N2



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:430039 HCAPLUS
DOCUMENT NUMBER: 129:65218
TITLE: Bifunctional chelating polysaccharides for detection and determination of metal ion levels in cells
INVENTOR(S): Kuhn, Michael A.; Meyer, Tobias; Allbritton, Nancy L.
PATENT ASSIGNEE(S): Molecular Probes, Inc., USA
SOURCE: U.S., 29 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5773227	A	19980630	US 1993-82269	19930623

PRIORITY APPLN. INFO.: US 1993-82269 19930623
OTHER SOURCE(S): MARPAT 129:65218

AB This invention describes bifunctional polysaccharides conjugated to both a chelating group suitable for the selective complexation of metal cations, and a targeting peptide specific for a cellular substructure. These bifunctional polysaccharides are primarily useful for the regulation, detection and quantification of metal ion levels, such as Ca2, Mg2, Na+, K+, or Li+, in specific cellular structures. Localization within the cellular structure is accomplished by the targeting peptide, whereupon the large, water-sol. polysaccharide prevents diffusion of the chelating group

from the targeted site. When the target cell structure is the nucleus of a fertilized egg cell, the polysaccharide-chelator conjugate remains sequestered within the nucleus until the breakdown of the nuclear envelope, whereupon the reagent becomes sequestered into both daughter nuclei. This means of tracking daughter cells is practical even through several cell divisions.

IT **209053-27-0DP**, dextran-peptide conjugate
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of bifunctional chelating polysaccharides for detection and detn. of metal ion levels in cells)

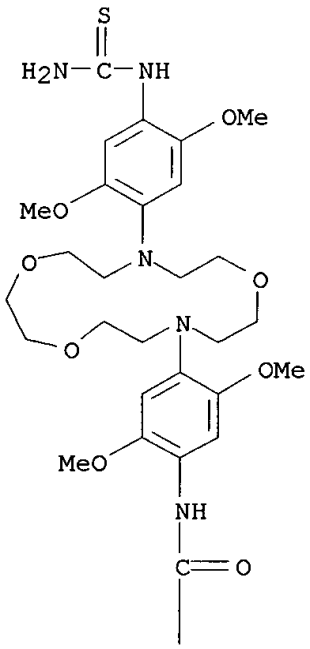
RN 209053-27-0 HCAPLUS

CN Methanaminium, N,N,N-trimethyl-, salt with 5-[[[4-[13-[4-[(aminothioxomethyl)amino]-2,5-dimethoxyphenyl]-1,4,10-trioxa-7,13-diazacyclopentadec-7-yl]-2,5-dimethoxyphenyl]amino]carbonyl]-2-(2,7-dichloro-3,10-dihydro-6-hydroxy-3-oxo-9-anthracenyl)benzoic acid (2:1) (9CI) (CA INDEX NAME)

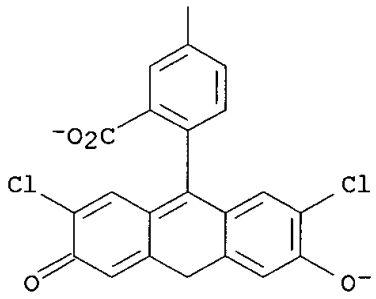
CM 1

CRN 209053-26-9
CMF C49 H49 Cl2 N5 O12 S

PAGE 1-A

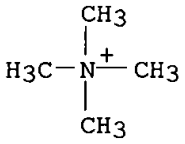


PAGE 2-A



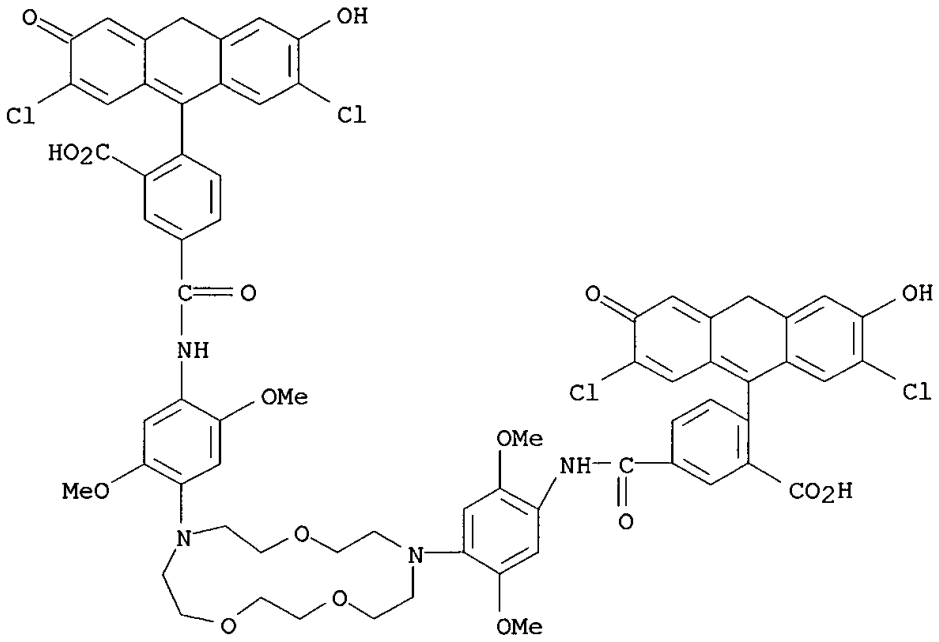
CM 2

CRN 51-92-3
CMF C4 H12 N



IT **209053-41-8**
RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); RCT (Reactant); ANST (Analytical study); PROC (Process); RACT (Reactant or reagent); USES (Uses)
(prepn. of bifunctional chelating polysaccharides for detection and detn. of metal ion levels in cells)
RN 209053-41-8 HCAPLUS
CN Benzoic acid, 3,3'-[1,4,10-trioxa-7,13-diazacyclopentadecane-7,13-diylbis[(2,5-dimethoxy-4,1-phenylene)iminocarbonyl]]bis[6-(2,7-dichloro-3,10-dihydro-6-hydroxy-3-oxo-9-anthracenyl)-, tetraammonium salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

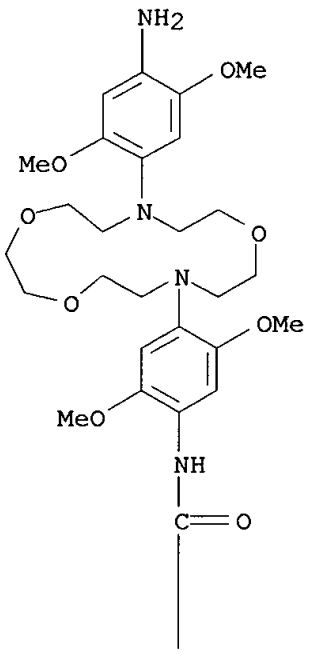
●4 NH_3

IT **209053-22-5P 209053-24-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of bifunctional chelating polysaccharides for detection and detn. of metal ion levels in cells)

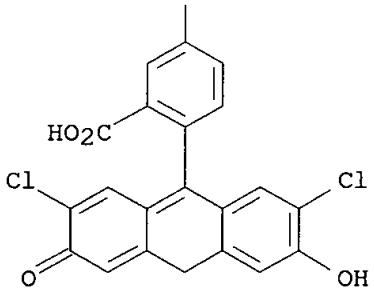
RN 209053-22-5 HCAPLUS

CN Benzoic acid, 5-[[[4-[13-(4-amino-2,5-dimethoxyphenyl)-1,4,10-trioxa-7,13-diazacyclopentadec-7-yl]-2,5-dimethoxyphenyl]amino]carbonyl]-2-(2,7-dichloro-3,10-dihydro-6-hydroxy-3-oxo-9-anthracenyl)-, diammonium salt (9CI) (CA INDEX NAME)

PAGE 1-A



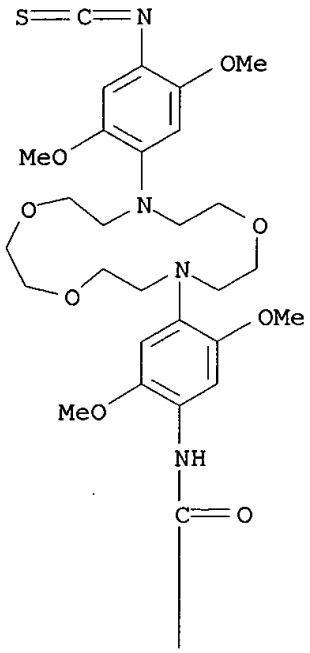
PAGE 2-A



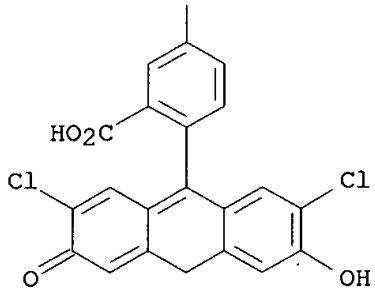
●2 NH_3

RN 209053-24-7 HCAPLUS
CN Benzoic acid, 2-(2,7-dichloro-3,10-dihydro-6-hydroxy-3-oxo-9-anthracenyl)-5-[[[4-[13-(4-isothiocyanato-2,5-dimethoxyphenyl)-1,4,10-trioxa-7,13-diazacyclopentadec-7-yl]-2,5-dimethoxyphenyl]amino]carbonyl]-, diammonium salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



●2 NH_3

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:212508 HCAPLUS
DOCUMENT NUMBER: 123:127664
TITLE: Photodecolorizing recording material
INVENTOR(S): Murofushi, Katsumi; Hosoda, Kiichi
PATENT ASSIGNEE(S): Showa Denko Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

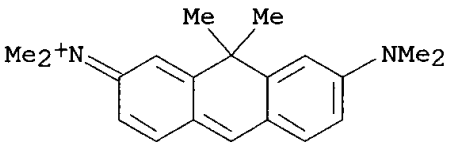
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06236000	A2	19940823	JP 1993-24427	19930212

PRIORITY APPLN. INFO.: JP 1993-24427 19930212

AB The material, which decolorizes by visible light, comprises cationic dyes R1R2R3R4B-.D+ (D+.A-) and decolorizing agent R5R6R7R8B-.Z+ [D+ = cation with absorption in visible region, R1-8 = alkyl, aryl, allyl, aralkyl, alkenyl, alkynyl, silyl (may be substituted), heterocycle; A- = halo ion, ClO4-, PF6- BF4-, SbF4-, sulfonate; Z+ = pyridinium, quaternary quinolinium, phosphonium]. Decolorizing toners and inks contg. the material are claimed. The material shows good stability to fluorescent light and images can be decolorized by visible light.

IT **161031-33-0 161205-36-3**
RL: TEM (Technical or engineered material use); USES (Uses)
(photodecolorizing recording material contg. cationic dye and decolorizing agent)

RN 161031-33-0 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, bromide (9CI) (CA INDEX NAME)



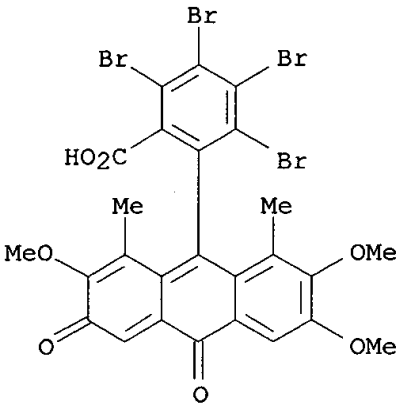
● Br^-

RN 161205-36-3 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

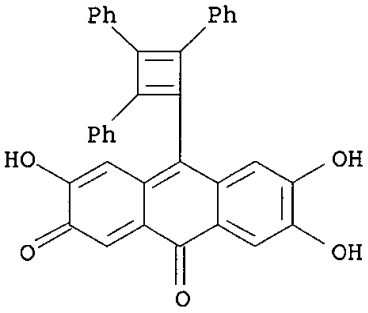
CM 1

CRN 47252-39-1
CMF C22 H24 B
CCI CCS

dimethyl-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



RN 127160-14-9 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(2,3,4-triphenyl-1,3-cyclobutadien-1-yl)- (9CI) (CA INDEX NAME)



L17 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:201287 HCAPLUS
DOCUMENT NUMBER: 108:201287
TITLE: Preparation of oxobenzanthracene derivatives as fluorescent dyes and their use for determination of enzymes or microorganisms in biological samples
INVENTOR(S): Goswami, Ramanuj; Chen, Chin Hsin
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: Eur. Pat. Appl., 40 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 231126	A2	19870805	EP 1987-300776	19870129
EP 231126	A3	19890816		

DE 3322945	A1	19850103	DE 1983-3322945	19830625
DE 3322945	C2	19900517		

PRIORITY APPLN. INFO.: DE 1983-3322945 19830625

AB New dyes for use in dye lasers are represented by general structures I and II, where R - R3 are H or (un)substituted alkyl, or are alkyl groups which may be bonded to neighboring C atoms of the arom. ring to form 5- or 6-membered heterocycles; R4 and R5 are H, Cl, alkyl, or alkoxy; R6 and R7 are H or C1-4 alkyl which may be bonded to a neighboring arom.-ring C atom; Y and Y' are residues of satd. ring systems which may contain O as an addnl. heteroatom; and X- is an anion. The dyes are prepd. by addn. of NaCN to the corresponding CN-free analogs followed by oxidn. of the resultant CN-substituted leuco compds., e.g. with Br or FeCl3. Typical dyes are I (R = R1 = R2 = R3 = Me, R4 = R5 = H, X = Br) [**90145-98-5**] and III [90100-70-2], the latter of which, at 4.2 .times. 10-4 M concn. in HOCH2CH2OH, exhibited max. output at 790-800 nm when pumped by a Kr laser.

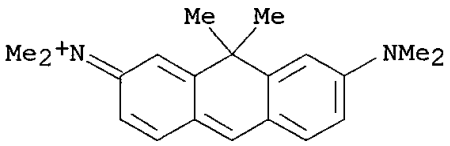
IT **51529-10-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(addn. reaction of, with sodium cyanide)

RN 51529-10-3 HCAPLUS

CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, nitrate (9CI) (CA INDEX NAME)

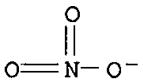
CM 1

CRN 17717-35-0
CMF C20 H25 N2



CM 2

CRN 14797-55-8
CMF N O3

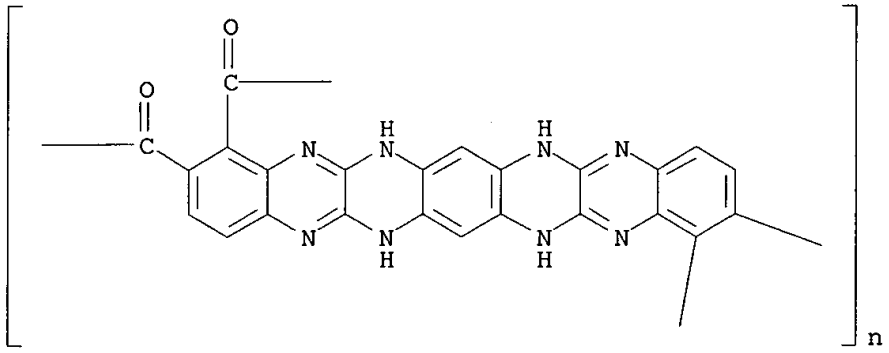


IT **90145-98-5P**
RL: PREP (Preparation)
(laser dye, manuf. of)

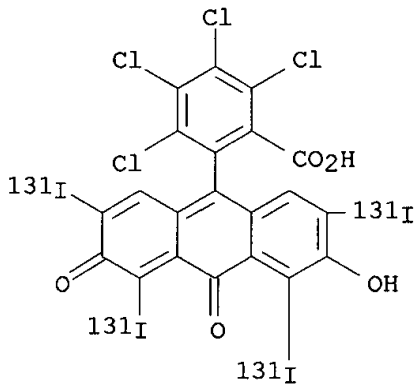
RN 90145-98-5 HCAPLUS

CN Methanaminium, N-[10-cyano-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, bromide (9CI) (CA INDEX NAME)

IT **31631-39-7**
RL: USES (Uses)
(fiber, heat-resistant)
RN 31631-39-7 HCAPLUS
CN Poly[(5,9,14,18-tetrahydrobenzo[1'',2'':5,6;4'',5'':5',6']dipyrazino[2,3-b:2',3'-b']diquinoxaline-1,2:10,11-tetrayl)-10,11-dicarbonyl] (8CI, 9CI) (CA INDEX NAME)



L17 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1972:6743 HCAPLUS
DOCUMENT NUMBER: 76:6743
TITLE: Quality control and chemical analysis of radiopharmaceuticals at a small research center
AUTHOR(S): Kim, You Sun
CORPORATE SOURCE: At. Energy Res. Inst., Seoul, S. Korea
SOURCE: Anal. Contr. Radiopharm., Proc. Panel (1970), Meeting Date 1969, 83-97. IAEA: Vienna, Austria. CODEN: 23QIAL
DOCUMENT TYPE: Conference
LANGUAGE: English
AB IAEA: Vienna, Austria. Paper, thin layer, and ion exchange chromatog. techniques used for quality control and chem. anal. of radiopharmaceuticals at the Korean Atomic Energy Research Institute are described. Studies of radioiodinated human serum albumin by electrophoresis and degradation, and stability studies of hippuran-131I, Na rose bengal-131I, Neohydrin-203Hg, 1-bromo-2-hydroxypropylmercury-203Hg, 113Inm colloids, 99Tcm prepns., triolein-131I, and oleic acid-131I showed that these chemicals, when made in the lab. usually had a longer shelf-life than those obtained com.
IT **36531-00-7**
RL: ANST (Analytical study)
(quality control of prepns. of)
RN 36531-00-7 HCAPLUS
CN Benzoic acid, 2,3,4,5-tetrachloro-6-[3,10-dihydro-6-hydroxy-2,4,5,7-tetra(iodo-131I)-3,10-dioxo-9-anthracenyl]-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

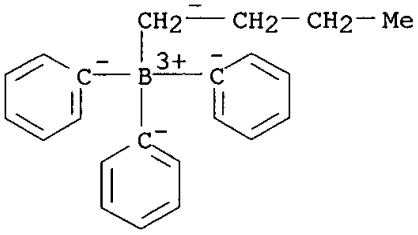
L17 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1971:465261 HCAPLUS
DOCUMENT NUMBER: 75:65261
TITLE: Electronic absorption spectra of analogs and derivatives of Michler's ketone
AUTHOR(S): Hallas, G.; Castelino, R. W.
CORPORATE SOURCE: Dep. Colour Chem. Dyeing, Univ. Leeds, Leeds, UK
SOURCE: Journal of the Chemical Society [Section] B: Physical Organic (1971), (7), 1468-71
CODEN: JCSPAC; ISSN: 0045-6470
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Analogs, e.g. bis(2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl) ketone (I), of Michler's ketone in wich the terminal groups are effectively conjugated with the aromatic system, give charge-resonance systems by protonation of the O atoms in acid. Formation of a quinonoid cation is completely inhibited by crowding substituents adjacent to a NMe2 group, e.g., the Me groups in 4,4'-bis(dimethylamino)-3-methylbenzophenone and 4-(dimethylamino)-3-methylphenyl 2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl ketone (II). The tendency of the amino N atoms to conjugate with the aromatic rings is reduced when the trimethylene groups in I are replaced by the ethylene groups, as in bis(1,2,5,6-tetrahydro-4H-pyrrolo-[3,2,1-ij]quinol-8-yl) ketone (III); a similar result is found for bis(1,2,3,4-tetrahydro-1-methyl-6-quinolyl) ketone and bis(1-methyl-5-indolinyl) ketone.

IT **32987-70-5**
RL: PRP (Properties)
(adsorption spectra of)

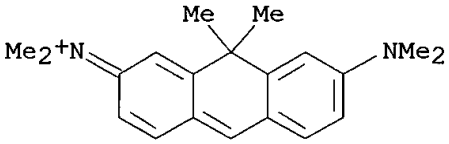
RN 32987-70-5 HCAPLUS
CN Ammonium, [7-(dimethylamino)-10-hydroxy-9,9-dimethyl-2(9H)-anthrylidene]dimethyl-, chloride (8CI) (CA INDEX NAME)

Hallas (GA)



CM 2

CRN 17717-35-0
CMF C20 H25 N2



L17 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:548383 HCAPLUS
DOCUMENT NUMBER: 113:148383
TITLE: Use of fluorone derivatives in contrast media for cancerous growth diagnosis
INVENTOR(S): Dzbanovskii, N. N.; Polsachev, V. I.; Potemkina, E. V.; Rakhimov, A. T.; Rubin, L. B.; Osipov, A. S.
PATENT ASSIGNEE(S): Moscow State University, USSR
SOURCE: Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 313942	A1	19890503	EP 1988-117157	19881014
R: CH, DE, FR, GB, IT, LI, SE				
FI 8804720	A	19890416	FI 1988-4720	19881013
FI 8804721	A	19890416	FI 1988-4721	19881013
NO 8804565	A	19890417	NO 1988-4565	19881013
NO 8804566	A	19890417	NO 1988-4566	19881013
JP 01211531	A2	19890824	JP 1988-257393	19881014
JP 01221329	A2	19890904	JP 1988-257394	19881014
EP 454185	A2	19911030	EP 1991-111514	19881014
EP 454185	A3	19920108		
R: CH, DE, FR, GB, IT, LI, SE				
BR 8805356	A	19890613	BR 1988-5356	19881017
BR 8805359	A	19890613	BR 1988-5359	19881017
US 5093106	A	19920303	US 1990-485785	19900223

PRIORITY APPLN. INFO.: SU 1987-4313068 19871015
US 1988-255120 19881007

OTHER SOURCE(S): MARPAT 113:148383

AB Fluorone derivs. I [R1, R7 = H, halo, 131I, Me, CF3, CCl3, Et, CO2H, CO2Me, NO2, OH, OMe, OEt; R2, R4-R6 = H, halo, 131I, C1-5 (halo)hydrocarbyl, etc.; R3 = H, alkali metal cation, ammonium, etc.; R8 = H, C1-5 (substituted) alkyl, aminoacyl, etc.] are useful as contrast agents for x-ray, radio-, fluorescence, and NMR imaging of malignant neoplasms. They may be used alone or in combination with saccharides, disaccharides, vitamins, and/or cell-membrane permeability blockers (e.g. antihistaminics) to increase the accumulation of I in tumor cells. Thus, a contrast agent compn. contained II (I; R1-R5 = R7 = H, R6 = CO2Et, R8 = 2-HO2CC6H4) 0.1, glucose 98.9, vitamin compn. (retinol 1, thiamin 6, riboflavin 3, pyridoxine-HCl 6, rutin 6, tocopherol acetate 3, ascorbic acid 60, nicotinic acid 15%) 0.5, and 3-methyl-9-benzyl-1,2,3,4-tetrahydrocarboline naphthalene-1,5-disulfonate (membrane permeability blocker) 0.5 wt.%. The accumulation of II from this compn. by transplanted cervical carcinoma, Lewis tumor, and large intestinal carcinoma was 6.0-fold that by normal tissues.

IT **126489-88-1 126489-89-2 126489-90-5**
126489-91-6 126489-92-7 126489-93-8
126489-94-9 126489-95-0 126489-96-1
126489-97-2 126489-98-3 126489-99-4
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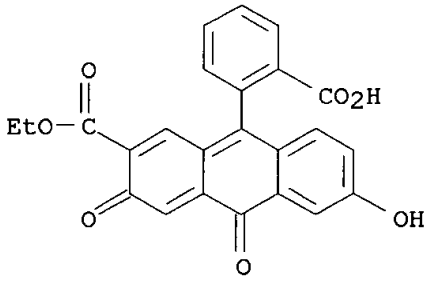
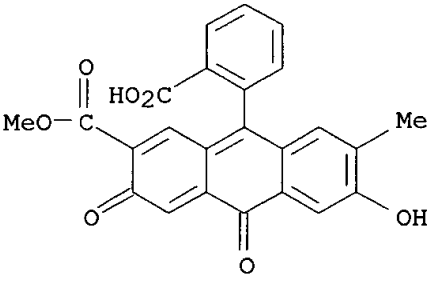
126491-27-8 126491-28-9 126514-22-5
126514-23-6 126514-24-7 126514-25-8
126514-26-9 126514-27-0 127160-14-9
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as contrast agent, for neoplasm diagnosis)

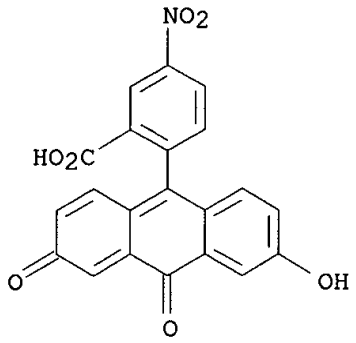
RN 126489-88-1 HCAPLUS
CN 2-Anthracenecarboxylic acid, 9-(2-carboxyphenyl)-3,10-dihydro-6-hydroxy-3,10-dioxo-, 2-ethyl ester (9CI) (CA INDEX NAME)



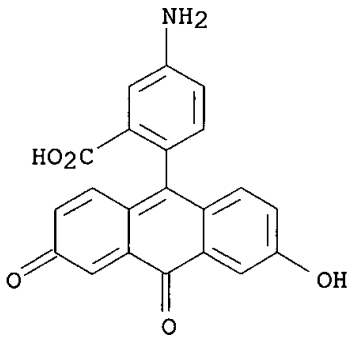
RN 126489-89-2 HCAPLUS
CN 2-Anthracenecarboxylic acid, 9-(2-carboxyphenyl)-3,10-dihydro-6-hydroxy-7-methyl-3,10-dioxo-, 2-methyl ester (9CI) (CA INDEX NAME)



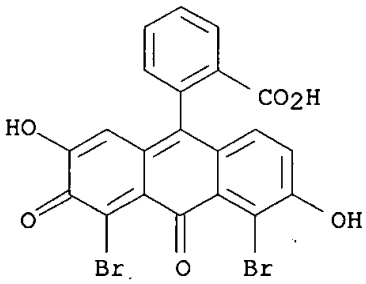
RN 126489-90-5 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)-5-nitro- (9CI) (CA INDEX NAME)



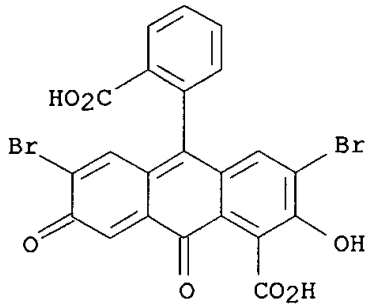
RN 126489-91-6 HCAPLUS
CN Benzoic acid, 5-amino-2-(3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



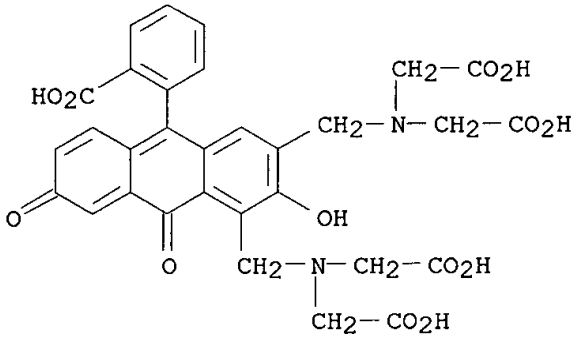
RN 126489-92-7 HCAPLUS
CN Benzoic acid, 2-(4,5-dibromo-3,10-dihydro-2,6-dihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



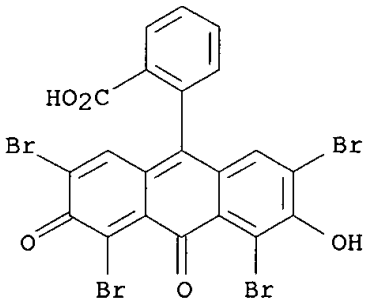
RN 126489-93-8 HCAPLUS
CN 1-Anthracenecarboxylic acid, 3,6-dibromo-10-(2-carboxyphenyl)-7,9-dihydro-2-hydroxy-7,9-dioxo- (9CI) (CA INDEX NAME)



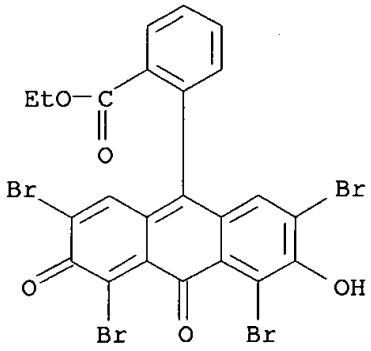
RN 126489-94-9 HCAPLUS
CN Benzoic acid, 2-[2,4-bis[[bis(carboxymethyl)amino]methyl]-6,10-dihydro-3-hydroxy-6,10-dioxo-9-anthracenyl]- (9CI) (CA INDEX NAME)



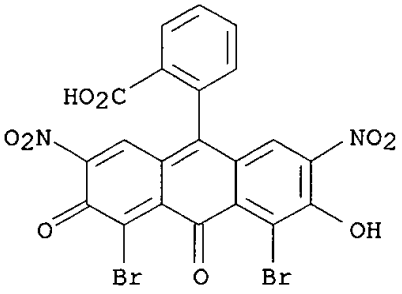
RN 126489-95-0 HCAPLUS
CN Benzoic acid, 2-(2,4,5,7-tetrabromo-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



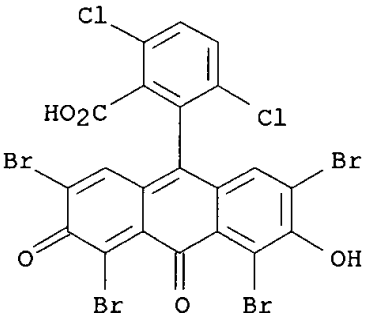
RN 126489-96-1 HCAPLUS
CN Benzoic acid, 2-(2,4,5,7-tetrabromo-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)-, ethyl ester (9CI) (CA INDEX NAME)



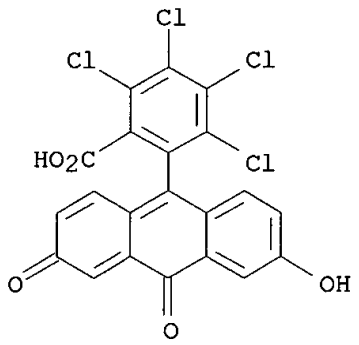
RN 126489-97-2 HCAPLUS
CN Benzoic acid, 2-(4,5-dibromo-3,10-dihydro-6-hydroxy-2,7-dinitro-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



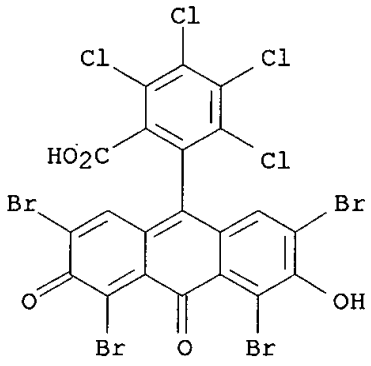
RN 126489-98-3 HCAPLUS
CN Benzoic acid, 3,6-dichloro-2-(2,4,5,7-tetrabromo-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



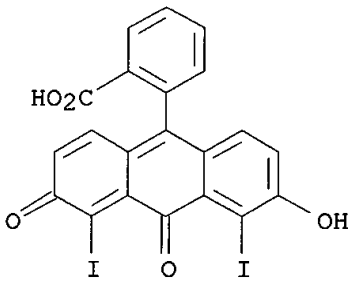
RN 126489-99-4 HCAPLUS
CN Benzoic acid, 2,3,4,5-tetrachloro-6-(3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



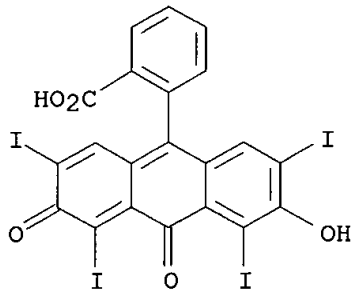
RN 126490-00-4 HCAPLUS
CN Benzoic acid, 2,3,4,5-tetrachloro-6-(2,4,5,7-tetrabromo-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



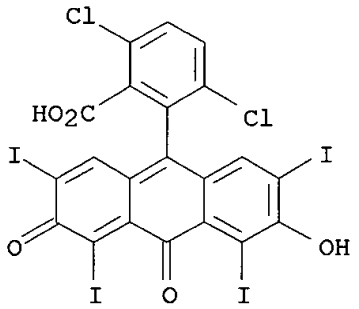
RN 126490-01-5 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-6-hydroxy-4,5-diiodo-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



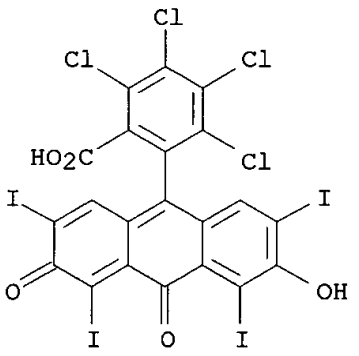
RN 126490-02-6 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-6-hydroxy-2,4,5,7-tetraiodo-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



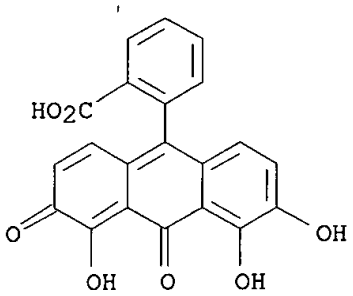
RN 126490-03-7 HCAPLUS
CN Benzoic acid, 3,6-dichloro-2-(3,10-dihydro-6-hydroxy-2,4,5,7-tetraiodo-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



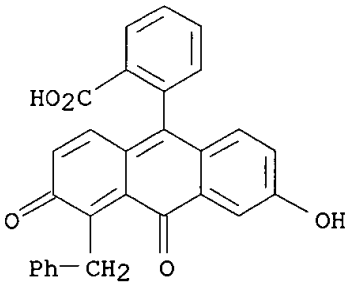
RN 126490-04-8 HCAPLUS
CN Benzoic acid, 2,3,4,5-tetrachloro-6-(3,10-dihydro-6-hydroxy-2,4,5,7-tetraiodo-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



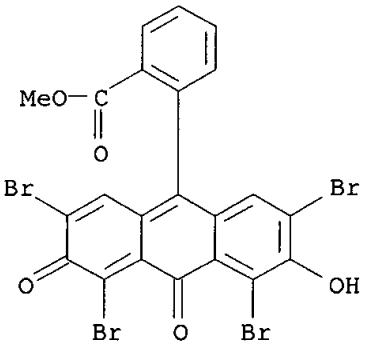
RN 126490-05-9 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-4,5,6-trihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



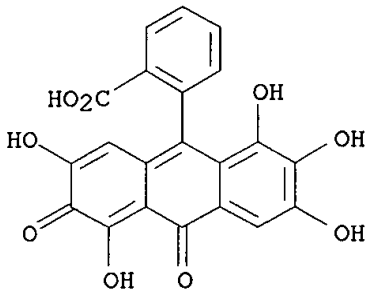
RN 126490-06-0 HCAPLUS
CN Benzoic acid, 2-[3,10-dihydro-6-hydroxy-3,10-dioxo-4-(phenylmethyl)-9-anthracenyl]- (9CI) (CA INDEX NAME)



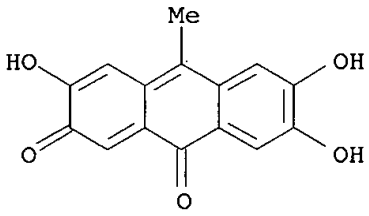
RN 126490-07-1 HCAPLUS
CN Benzoic acid, 2-(2,4,5,7-tetrabromo-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)-, methyl ester (9CI) (CA INDEX NAME)



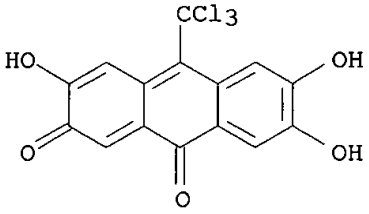
RN 126490-08-2 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-2,4,6,7,8-pentahydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



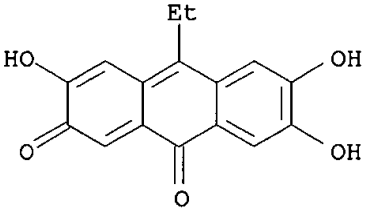
RN 126490-09-3 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-methyl- (9CI) (CA INDEX NAME)



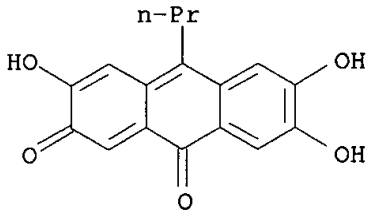
RN 126490-10-6 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(trichloromethyl)- (9CI) (CA INDEX NAME)



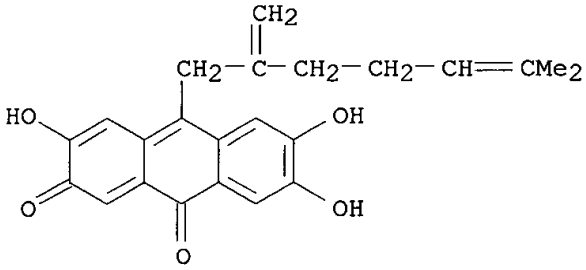
RN 126490-11-7 HCAPLUS
CN 2,9-Anthracenedione, 10-ethyl-3,6,7-trihydroxy- (9CI) (CA INDEX NAME)



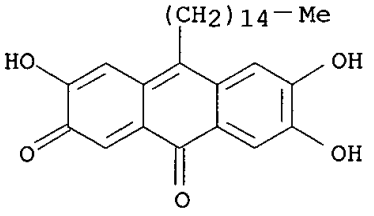
RN 126490-12-8 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-propyl- (9CI) (CA INDEX NAME)



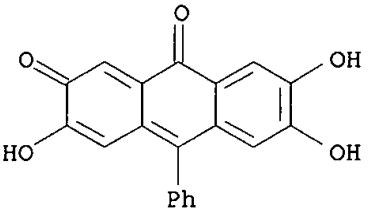
RN 126490-13-9 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(6-methyl-2-methylene-5-heptenyl)- (9CI) (CA INDEX NAME)



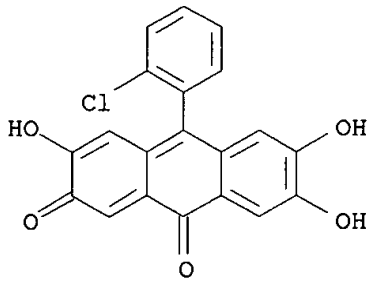
RN 126490-14-0 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-pentadecyl- (9CI) (CA INDEX NAME)



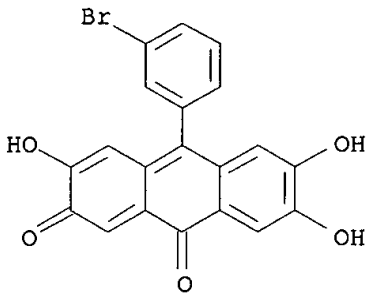
RN 126490-15-1 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-phenyl- (9CI) (CA INDEX NAME)



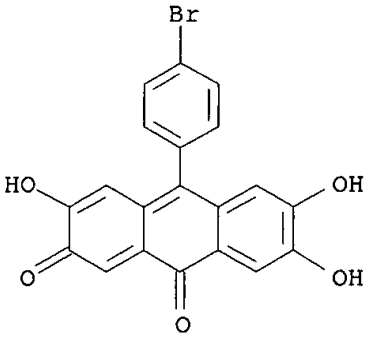
RN 126490-16-2 HCAPLUS
CN 2,9-Anthracenedione, 10-(2-chlorophenyl)-3,6,7-trihydroxy- (9CI) (CA INDEX NAME)



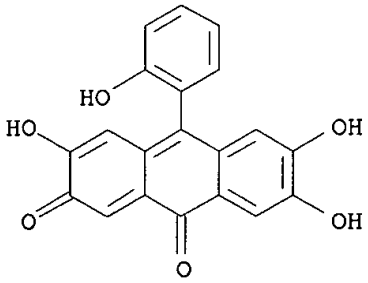
RN 126490-17-3 HCAPLUS
CN 2,9-Anthracenedione, 10-(3-bromophenyl)-3,6,7-trihydroxy- (9CI) (CA INDEX NAME)



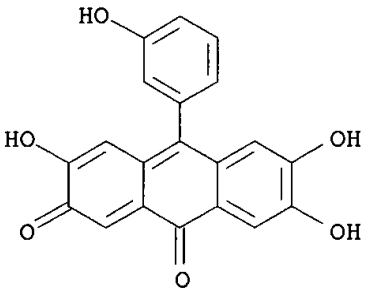
RN 126490-18-4 HCAPLUS
CN 2,9-Anthracenedione, 10-(4-bromophenyl)-3,6,7-trihydroxy- (9CI) (CA INDEX NAME)



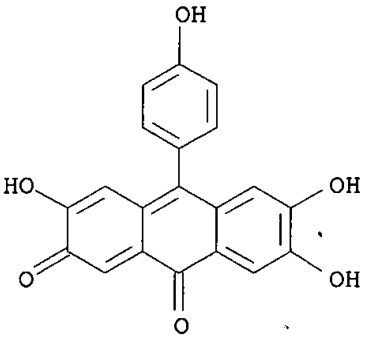
RN 126490-19-5 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(2-hydroxyphenyl)- (9CI) (CA INDEX NAME)



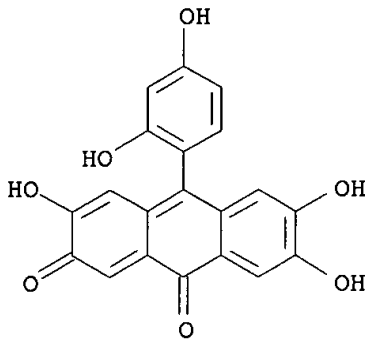
RN 126490-20-8 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(3-hydroxyphenyl)- (9CI) (CA INDEX NAME)



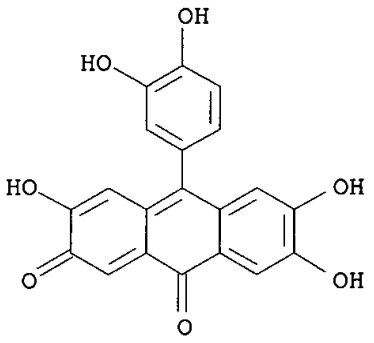
RN 126490-21-9 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



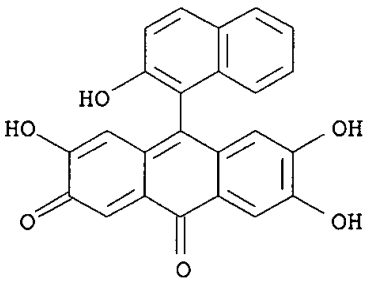
RN 126490-22-0 HCAPLUS
CN 2,9-Anthracenedione, 10-(2,4-dihydroxyphenyl)-3,6,7-trihydroxy- (9CI) (CA INDEX NAME)



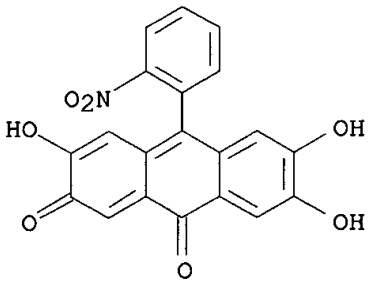
RN 126490-23-1 HCAPLUS
CN 2,9-Anthracenedione, 10-(3,4-dihydroxyphenyl)-3,6,7-trihydroxy- (9CI) (CA INDEX NAME)



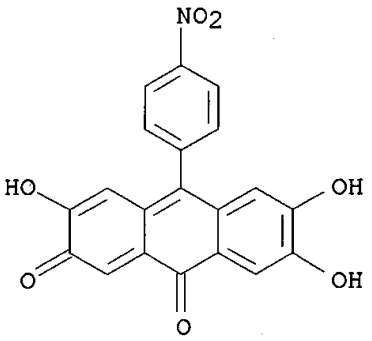
RN 126490-24-2 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(2-hydroxy-1-naphthalenyl)- (9CI) (CA INDEX NAME)



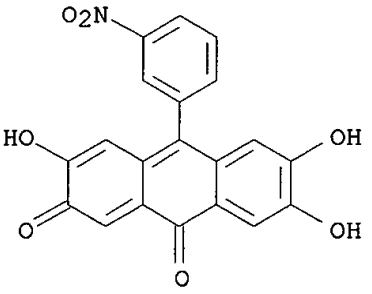
RN 126490-25-3 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(2-nitrophenyl)- (9CI) (CA INDEX NAME)



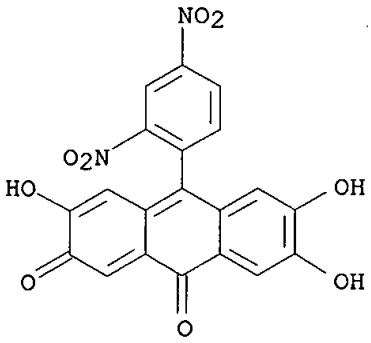
RN 126490-26-4 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



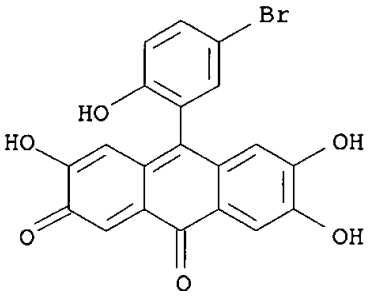
RN 126490-27-5 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(3-nitrophenyl)- (9CI) (CA INDEX NAME)



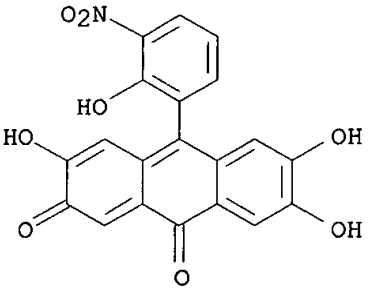
RN 126490-28-6 HCAPLUS
CN 2,9-Anthracenedione, 10-(2,4-dinitrophenyl)-3,6,7-trihydroxy- (9CI) (CA INDEX NAME)



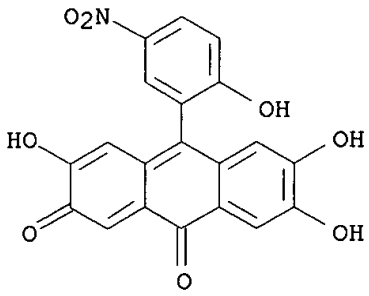
RN 126490-29-7 HCAPLUS
CN 2,9-Anthracenedione, 10-(5-bromo-2-hydroxyphenyl)-3,6,7-trihydroxy- (9CI) (CA INDEX NAME)



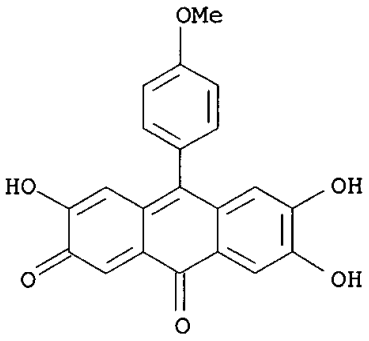
RN 126490-30-0 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(2-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



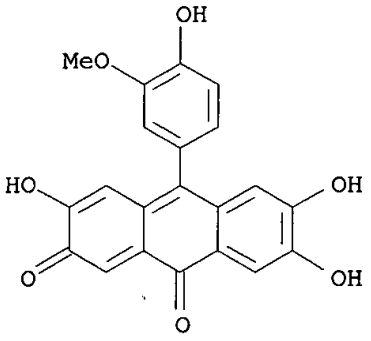
RN 126490-31-1 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(2-hydroxy-5-nitrophenyl)- (9CI) (CA INDEX NAME)



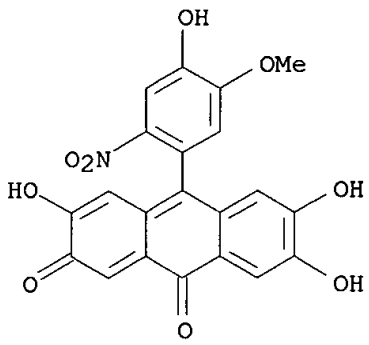
RN 126490-32-2 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



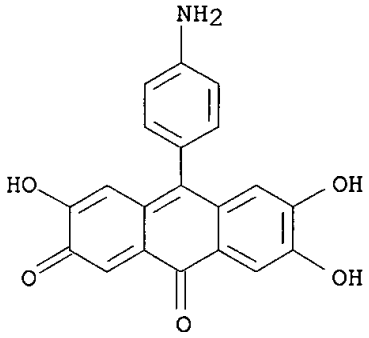
RN 126490-33-3 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(4-hydroxy-3-methoxyphenyl)- (9CI) (CA INDEX NAME)



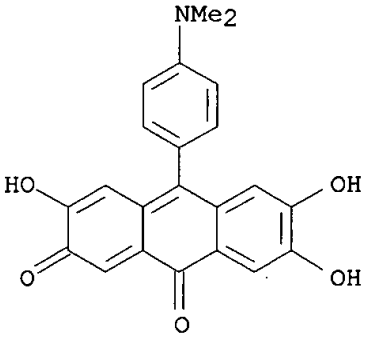
RN 126490-34-4 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(4-hydroxy-5-methoxy-2-nitrophenyl)- (9CI) (CA INDEX NAME)



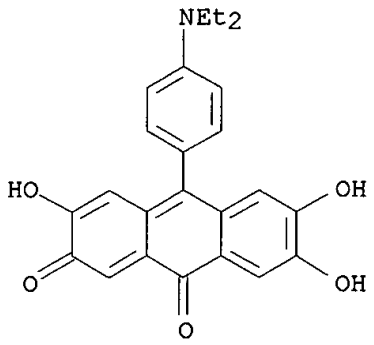
RN 126490-35-5 HCAPLUS
CN 2,9-Anthracenedione, 10-(4-aminophenyl)-3,6,7-trihydroxy- (9CI) (CA INDEX NAME)



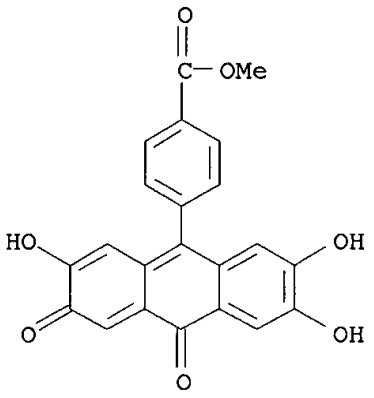
RN 126490-36-6 HCAPLUS
CN 2,9-Anthracenedione, 10-[4-(dimethylamino)phenyl]-3,6,7-trihydroxy- (9CI) (CA INDEX NAME)



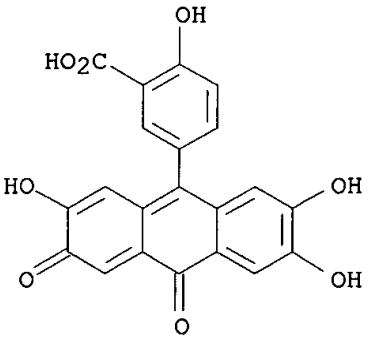
RN 126490-37-7 HCAPLUS
CN 2,9-Anthracenedione, 10-[4-(diethylamino)phenyl]-3,6,7-trihydroxy- (9CI) (CA INDEX NAME)



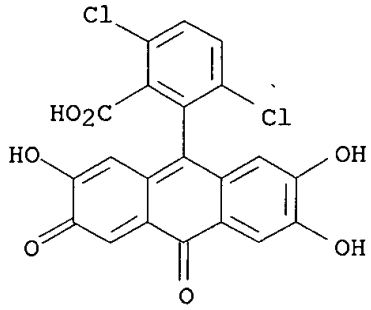
RN 126490-38-8 HCAPLUS
CN Benzoic acid, 4-(3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)-, methyl ester (9CI) (CA INDEX NAME)



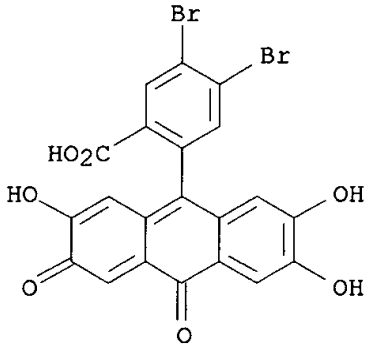
RN 126490-39-9 HCAPLUS
CN Benzoic acid, 5-(3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)-2-hydroxy- (9CI) (CA INDEX NAME)



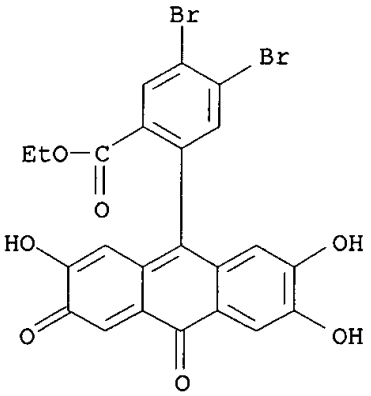
RN 126490-40-2 HCAPLUS
CN Benzoic acid, 3,6-dichloro-2-(3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



RN 126490-41-3 HCAPLUS
CN Benzoic acid, 4,5-dibromo-2-(3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)

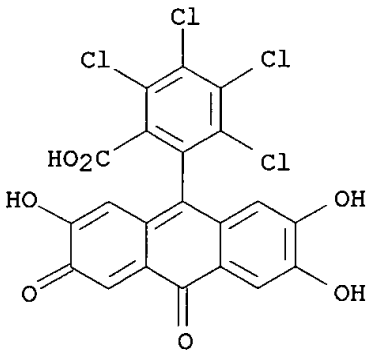


RN 126490-42-4 HCAPLUS
CN Benzoic acid, 4,5-dibromo-2-(3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)-, ethyl ester (9CI) (CA INDEX NAME)

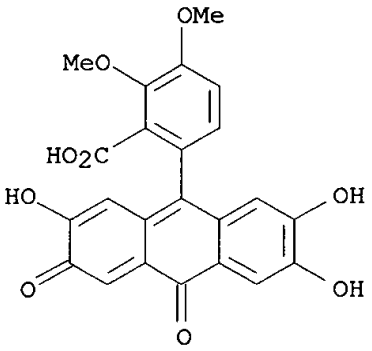


RN 126490-43-5 HCAPLUS
CN Benzoic acid, 2,3,4,5-tetrachloro-6-(3,10-dihydro-2,6,7-trihydroxy-3,10-

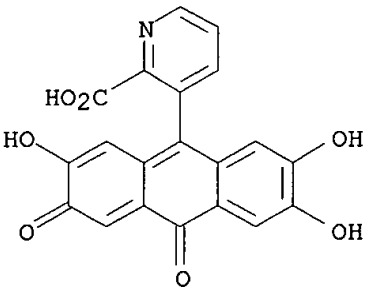
dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



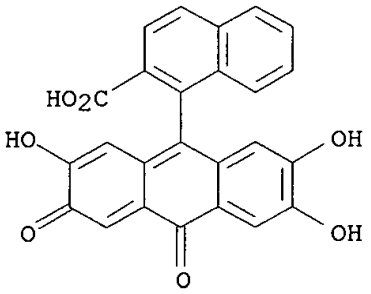
RN 126490-44-6 HCAPLUS
CN Benzoic acid, 6-(3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)-2,3-dimethoxy- (9CI) (CA INDEX NAME)



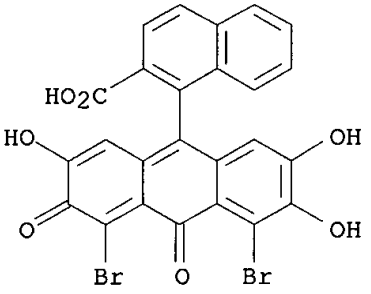
RN 126490-45-7 HCAPLUS
CN 2-Pyridinecarboxylic acid, 3-(3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



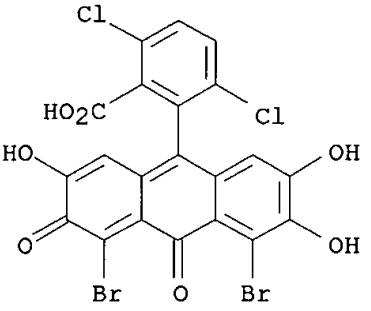
RN 126490-46-8 HCAPLUS
CN 2-Naphthalenecarboxylic acid, 1-(3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



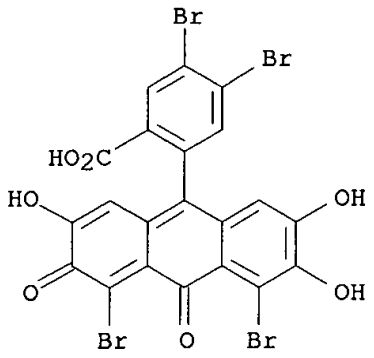
RN 126490-47-9 HCAPLUS
CN 2-Naphthalenecarboxylic acid, 1-(4,5-dibromo-3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



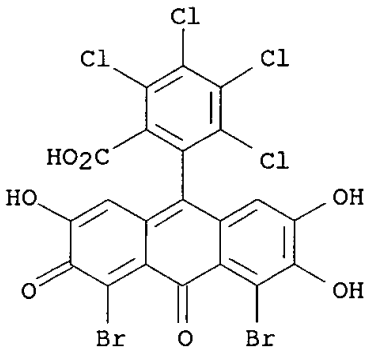
RN 126490-48-0 HCAPLUS
CN Benzoic acid, 3,6-dichloro-2-(4,5-dibromo-3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



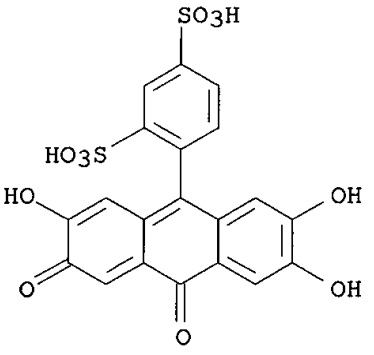
RN 126490-49-1 HCAPLUS
CN Benzoic acid, 4,5-dibromo-2-(4,5-dibromo-3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



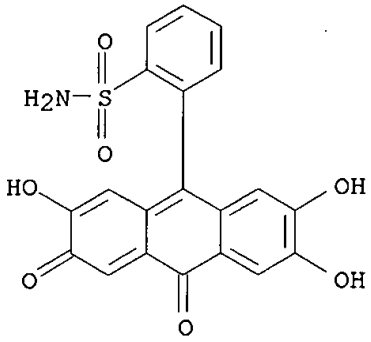
RN 126490-50-4 HCAPLUS
CN Benzoic acid, 2,3,4,5-tetrachloro-6-(4,5-dibromo-3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



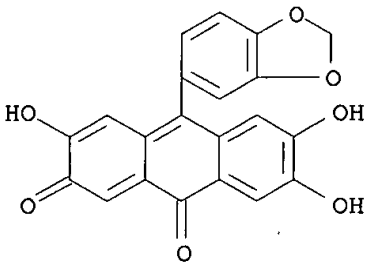
RN 126490-51-5 HCAPLUS
CN 1,3-Benzenedisulfonic acid, 4-(3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



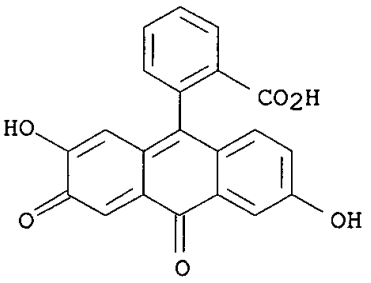
RN 126490-52-6 HCAPLUS
CN Benzenesulfonamide, 2-(3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



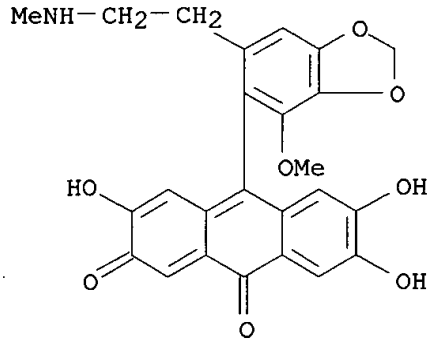
RN 126490-53-7 HCAPLUS
CN 2,9-Anthracenedione, 10-(1,3-benzodioxol-5-yl)-3,6,7-trihydroxy- (9CI) (CA INDEX NAME)



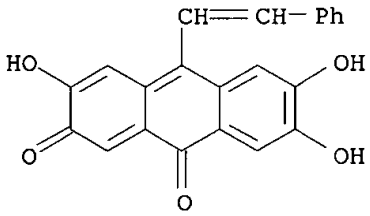
RN 126490-54-8 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-2,6-dihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



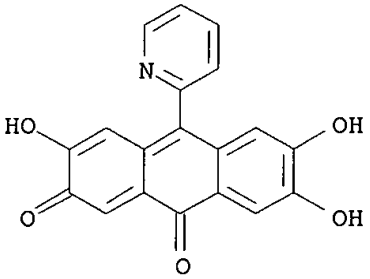
RN 126490-55-9 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-[4-methoxy-6-[2-(methylamino)ethyl]-1,3-benzodioxol-5-yl]- (9CI) (CA INDEX NAME)



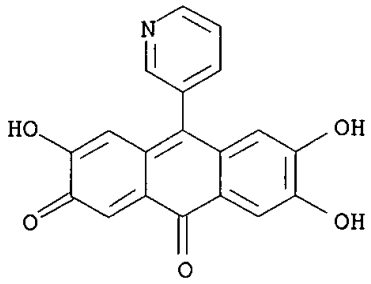
RN 126490-56-0 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(2-phenylethenyl)- (9CI) (CA INDEX NAME)



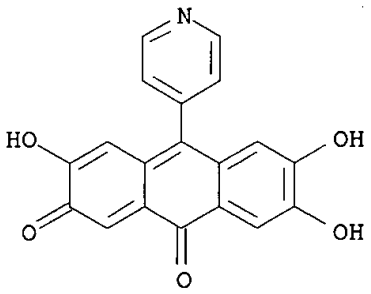
RN 126490-57-1 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(2-pyridinyl)- (9CI) (CA INDEX NAME)



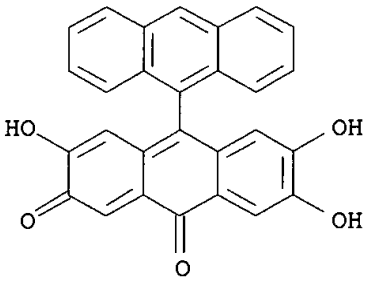
RN 126490-58-2 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(3-pyridinyl)- (9CI) (CA INDEX NAME)



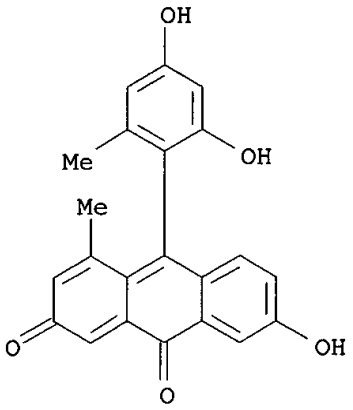
RN 126490-59-3 HCAPLUS
CN 2,9-Anthracenedione, 3,6,7-trihydroxy-10-(4-pyridinyl)- (9CI) (CA INDEX NAME)



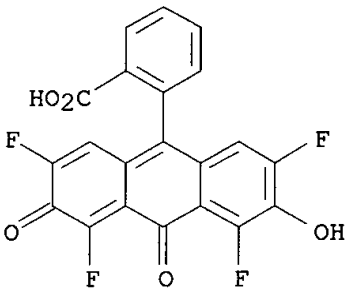
RN 126490-60-6 HCAPLUS
CN [9,9'-Bianthracene]-3,10-dione, 2,6,7-trihydroxy- (9CI) (CA INDEX NAME)



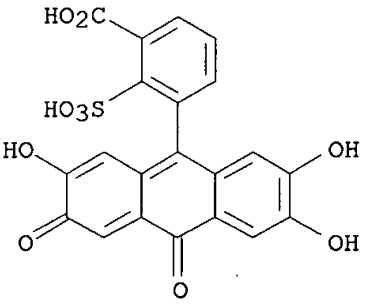
RN 126490-61-7 HCAPLUS
CN 2,9-Anthracenedione, 10-(2,4-dihydroxy-6-methylphenyl)-7-hydroxy-4-methyl- (9CI) (CA INDEX NAME)



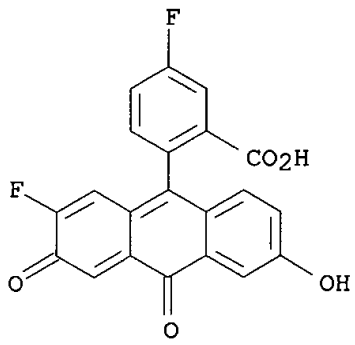
RN 126490-63-9 HCAPLUS
CN Benzoic acid, 2-(2,4,5,7-tetrafluoro-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



RN 126490-64-0 HCAPLUS
CN Benzoic acid, 3-(3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)-2-sulfo- (9CI) (CA INDEX NAME)

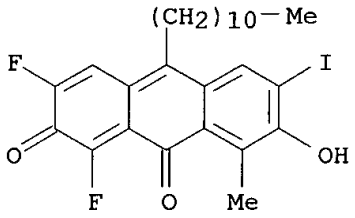


RN 126490-65-1 HCAPLUS
CN Benzoic acid, 5-fluoro-2-(2-fluoro-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)-, disodium salt (9CI) (CA INDEX NAME)

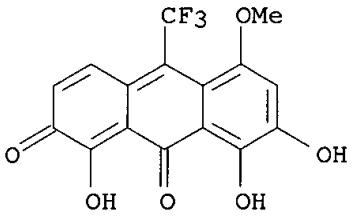


●2 Na

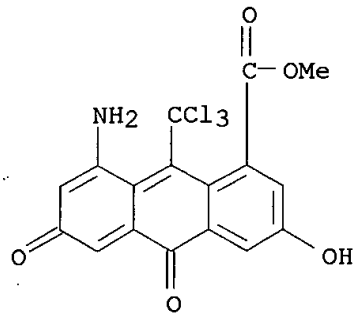
RN 126490-66-2 HCAPLUS
CN 2,9-Anthracenedione, 1,3-difluoro-7-hydroxy-6-iodo-8-methyl-10-undecyl- (9CI) (CA INDEX NAME)



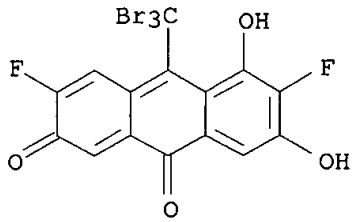
RN 126490-67-3 HCAPLUS
CN 2,9-Anthracenedione, 1,7,8-trihydroxy-5-methoxy-10-(trifluoromethyl)- (9CI) (CA INDEX NAME)



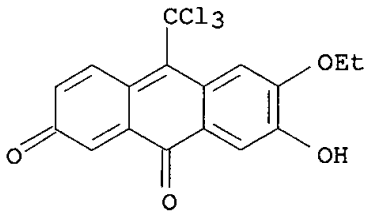
RN 126490-68-4 HCAPLUS
CN 1-Anthracenecarboxylic acid, 8-amino-6,10-dihydro-3-hydroxy-6,10-dioxo-9-(trichloromethyl)-, methyl ester (9CI) (CA INDEX NAME)



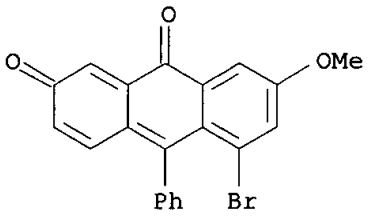
RN 126490-69-5 HCAPLUS
CN 2,9-Anthracenedione, 3,6-difluoro-5,7-dihydroxy-10-(tribromomethyl)- (9CI) (CA INDEX NAME)



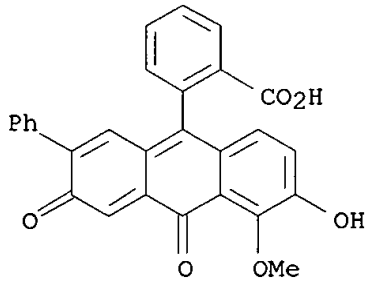
RN 126490-70-8 HCAPLUS
CN 2,9-Anthracenedione, 6-ethoxy-7-hydroxy-10-(trichloromethyl)- (9CI) (CA INDEX NAME)



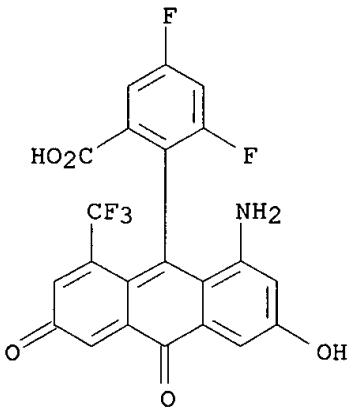
RN 126490-71-9 HCAPLUS
CN 2,9-Anthracenedione, 5-bromo-7-methoxy-10-phenyl- (9CI) (CA INDEX NAME)



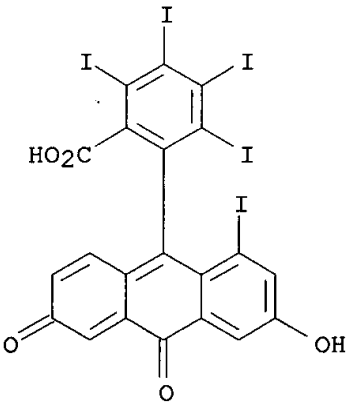
RN 126490-72-0 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-6-hydroxy-5-methoxy-3,10-dioxo-2-phenyl-9-anthracenyl)- (9CI) (CA INDEX NAME)

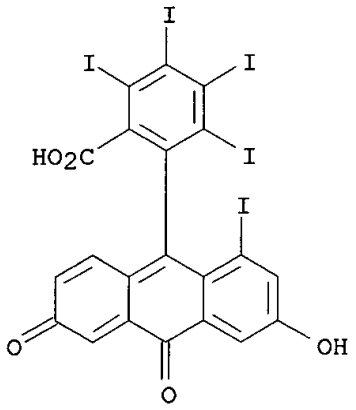


RN 126490-73-1 HCAPLUS
CN Benzoic acid, 2-[8-amino-3,10-dihydro-6-hydroxy-3,10-dioxo-1-(trifluoromethyl)-9-anthracenyl]-3,5-difluoro- (9CI) (CA INDEX NAME)

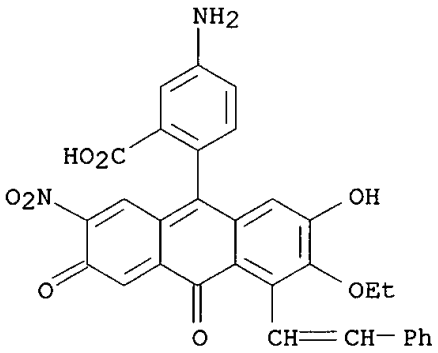


RN 126490-74-2 HCAPLUS
CN Benzoic acid, 2-(6,10-dihydro-3-hydroxy-1-iodo-6,10-dioxo-9-anthracenyl)-3,4,5,6-tetraiodo- (9CI) (CA INDEX NAME)

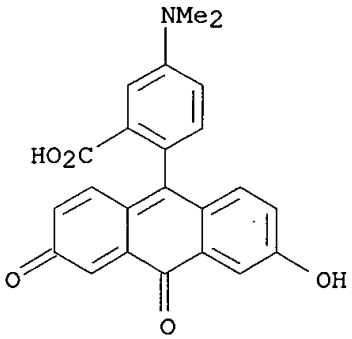




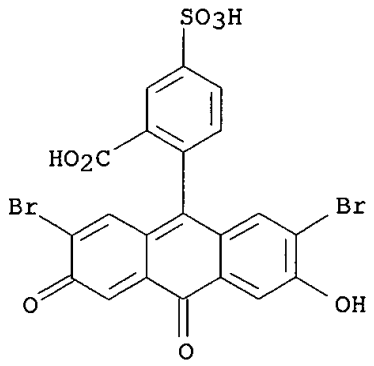
RN 126490-75-3 HCAPLUS
CN Benzoic acid, 5-amino-2-[6-ethoxy-3,10-dihydro-7-hydroxy-2-nitro-3,10-dioxo-5-(2-phenylethenyl)-9-anthracenyl]- (9CI) (CA INDEX NAME)



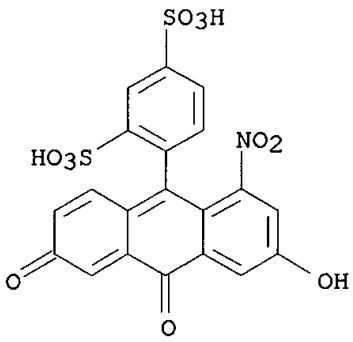
RN 126490-76-4 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)-5-(dimethylamino)- (9CI) (CA INDEX NAME)



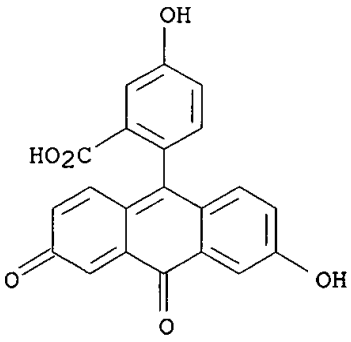
RN 126490-77-5 HCAPLUS
CN Benzoic acid, 2-(2,7-dibromo-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)-5-sulfo- (9CI) (CA INDEX NAME)



RN 126490-78-6 HCAPLUS
CN 1,3-Benzenedisulfonic acid, 4-(6,10-dihydro-3-hydroxy-1-nitro-6,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)

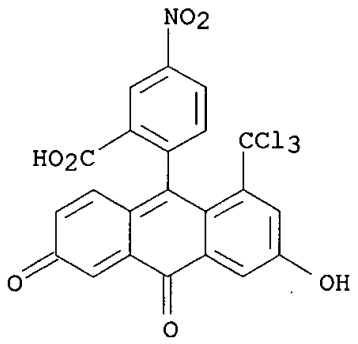


RN 126490-79-7 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)-5-hydroxy- (9CI) (CA INDEX NAME)

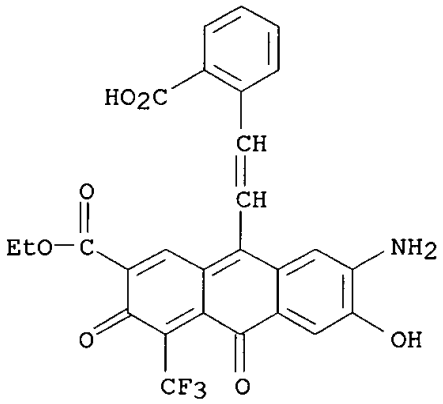


RN 126490-80-0 HCAPLUS
CN Benzoic acid, 2-[6,10-dihydro-3-hydroxy-6,10-dioxo-1-(trichloromethyl)-9-

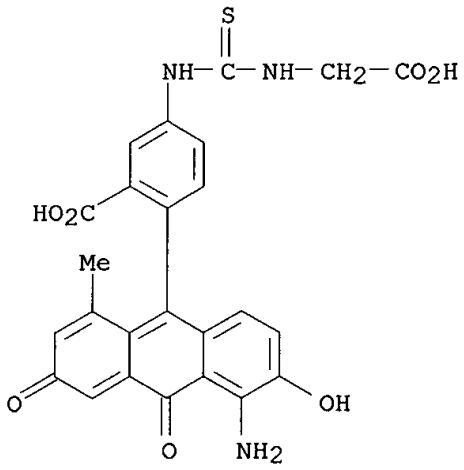
anthracenyl]-5-nitro- (9CI) (CA INDEX NAME)



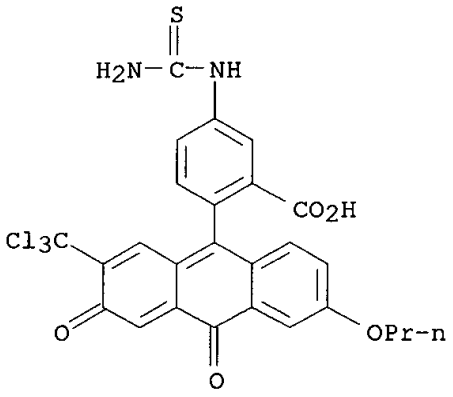
RN 126490-81-1 HCAPLUS
CN 2-Anthracenecarboxylic acid, 7-amino-9-[2-(2-carboxyphenyl)ethenyl]-3,10-dihydro-6-hydroxy-3,10-dioxo-4-(trifluoromethyl)-, 2-ethyl ester (9CI) (CA INDEX NAME)



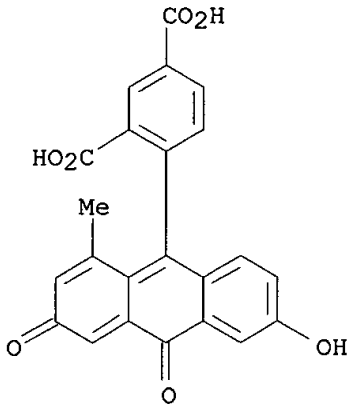
RN 126490-82-2 HCAPLUS
CN Benzoic acid, 2-(5-amino-3,10-dihydro-6-hydroxy-1-methyl-3,10-dioxo-9-anthracenyl)-5-[[[(carboxymethyl)amino]thioxomethyl]amino]- (9CI) (CA INDEX NAME)



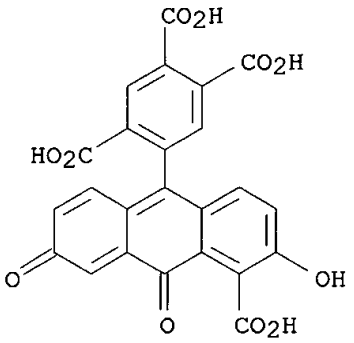
RN 126490-83-3 HCAPLUS
CN Benzoic acid, 5-[(aminothioxomethyl)amino]-2-[3,10-dihydro-3,10-dioxo-6-propoxy-2-(trichloromethyl)-9-anthracenyl]- (9CI) (CA INDEX NAME)



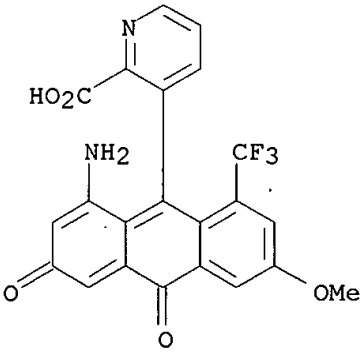
RN 126490-84-4 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 4-(3,10-dihydro-6-hydroxy-1-methyl-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



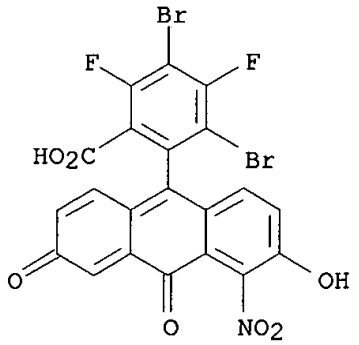
RN 126490-85-5 HCAPLUS
CN 1,2,4-Benzenetricarboxylic acid, 5-(5-carboxy-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



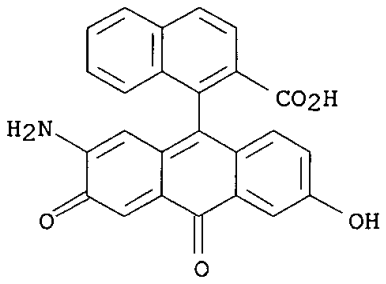
RN 126490-86-6 HCAPLUS
CN 2-Pyridinecarboxylic acid, 3-[1-amino-3,10-dihydro-6-methoxy-3,10-dioxo-8-(trifluoromethyl)-9-anthracenyl]- (9CI) (CA INDEX NAME)



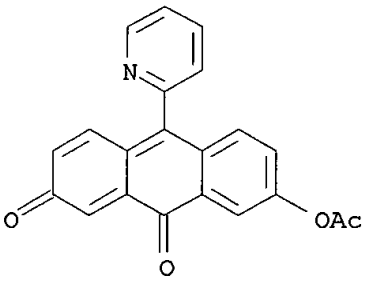
RN 126490-87-7 HCAPLUS
CN Benzoic acid, 3,5-dibromo-2-(3,10-dihydro-6-hydroxy-5-nitro-3,10-dioxo-9-anthracenyl)-4,6-difluoro- (9CI) (CA INDEX NAME)



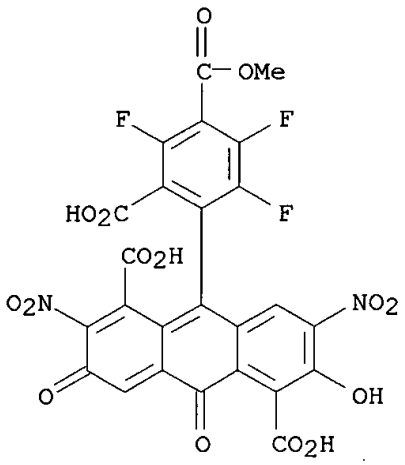
RN 126490-88-8 HCAPLUS
CN 2-Naphthalenecarboxylic acid, 1-(2-amino-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



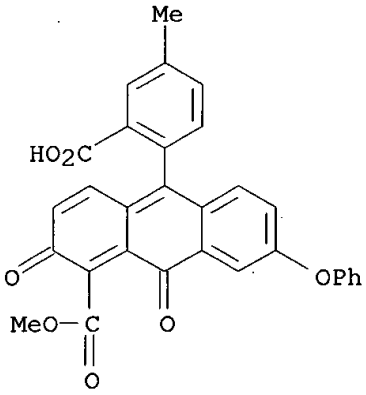
RN 126490-89-9 HCAPLUS
CN 2,9-Anthracenedione, 7-(acetyloxy)-10-(2-pyridinyl)- (9CI) (CA INDEX NAME)



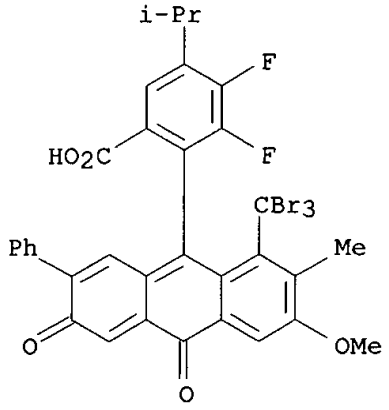
RN 126490-90-2 HCAPLUS
CN 1,5-Anthracenedicarboxylic acid, 9-[2-carboxy-3,5,6-trifluoro-4-(methoxycarbonyl)phenyl]-3,10-dihydro-6-hydroxy-2,7-dinitro-3,10-dioxo- (9CI) (CA INDEX NAME)



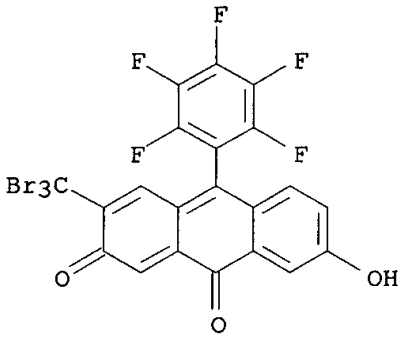
RN 126490-91-3 HCAPLUS
CN 1-Anthracenecarboxylic acid, 10-(2-carboxy-4-methylphenyl)-2,9-dihydro-2,9-dioxo-7-phenoxy-, 1-methyl ester (9CI) (CA INDEX NAME)



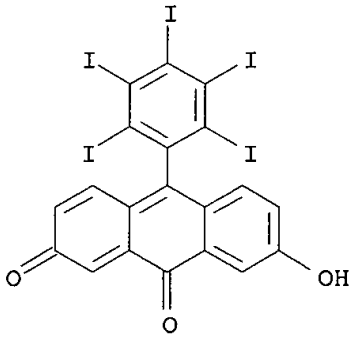
RN 126490-92-4 HCAPLUS
CN Benzoic acid, 2-[6,10-dihydro-3-methoxy-2-methyl-6,10-dioxo-7-phenyl-1-(tribromomethyl)-9-anthracenyl]-3,4-difluoro-5-(1-methylethyl)- (9CI) (CA INDEX NAME)



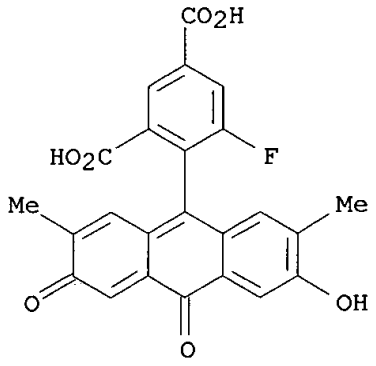
RN 126490-93-5 HCAPLUS
CN 2,9-Anthracenedione, 7-hydroxy-10-(pentafluorophenyl)-3-(tribromomethyl)-(9CI) (CA INDEX NAME)



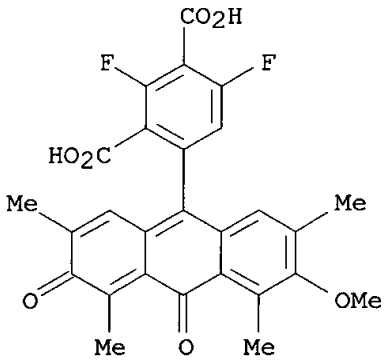
RN 126490-94-6 HCAPLUS
CN 2,9-Anthracenedione, 7-hydroxy-10-(pentaiodophenyl)- (9CI) (CA INDEX NAME)



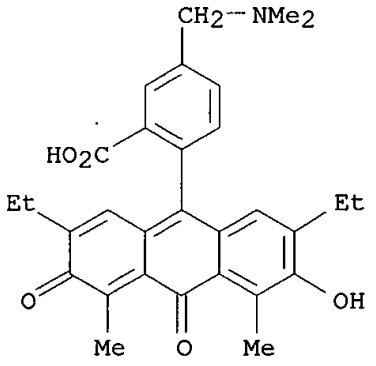
RN 126490-95-7 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 4-(3,10-dihydro-6-hydroxy-2,7-dimethyl-3,10-dioxo-9-anthracenyl)-5-fluoro- (9CI) (CA INDEX NAME)



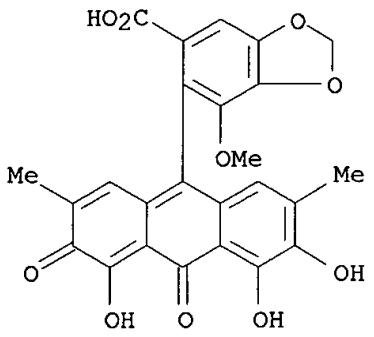
RN 126490-96-8 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 4-(3,10-dihydro-6-methoxy-2,4,5,7-tetramethyl-3,10-dioxo-9-anthracenyl)-2,6-difluoro- (9CI) (CA INDEX NAME)



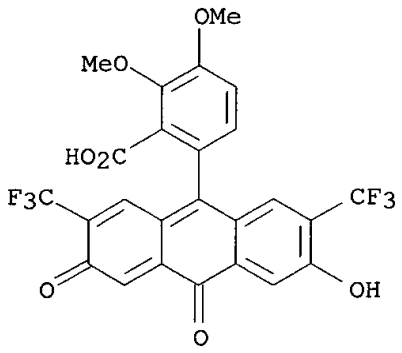
RN 126490-97-9 HCAPLUS
CN Benzoic acid, 2-(2,7-diethyl-3,10-dihydro-6-hydroxy-4,5-dimethyl-3,10-dioxo-9-anthracenyl)-5-[(dimethylamino)methyl]- (9CI) (CA INDEX NAME)



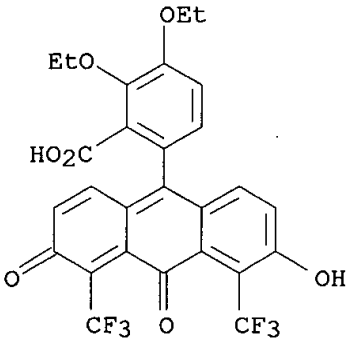
RN 126490-98-0 HCAPLUS
CN 1,3-Benzodioxole-5-carboxylic acid, 6-(3,10-dihydro-4,5,6-trihydroxy-2,7-dimethyl-3,10-dioxo-9-anthracenyl)-7-methoxy- (9CI) (CA INDEX NAME)



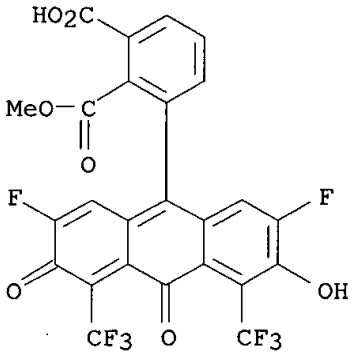
RN 126490-99-1 HCAPLUS
CN Benzoic acid, 6-[3,10-dihydro-6-hydroxy-3,10-dioxo-2,7-bis(trifluoromethyl)-9-anthracenyl]-2,3-dimethoxy- (9CI) (CA INDEX NAME)



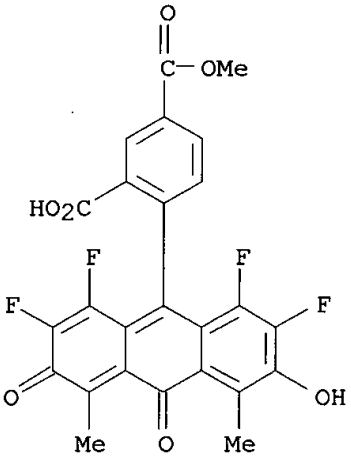
RN 126491-00-7 HCAPLUS
CN Benzoic acid, 6-[3,10-dihydro-6-hydroxy-3,10-dioxo-4,5-bis(trifluoromethyl)-9-anthracenyl]-2,3-diethoxy- (9CI) (CA INDEX NAME)



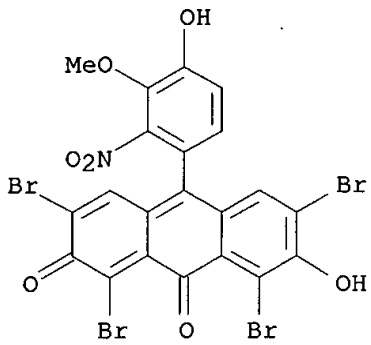
RN 126491-01-8 HCAPLUS
CN 1,2-Benzenedicarboxylic acid, 3-[2,7-difluoro-3,10-dihydro-6-hydroxy-3,10-dioxo-4,5-bis(trifluoromethyl)-9-anthracenyl]-, 2-methyl ester (9CI) (CA INDEX NAME)



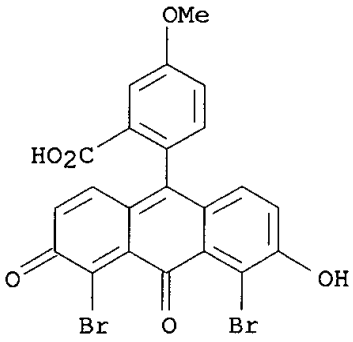
RN 126491-02-9 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 4-(1,2,7,8-tetrafluoro-3,10-dihydro-6-hydroxy-4,5-dimethyl-3,10-dioxo-9-anthracenyl)-, 1-methyl ester (9CI) (CA INDEX NAME)



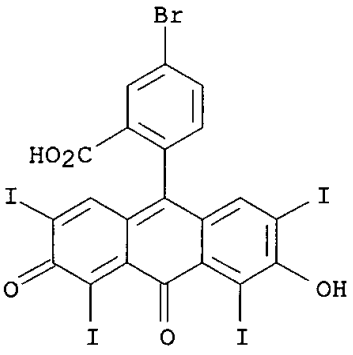
RN 126491-03-0 HCAPLUS
CN 2,9-Anthracenedione, 1,3,6,8-tetrabromo-7-hydroxy-10-(4-hydroxy-3-methoxy-2-nitrophenyl)- (9CI) (CA INDEX NAME)



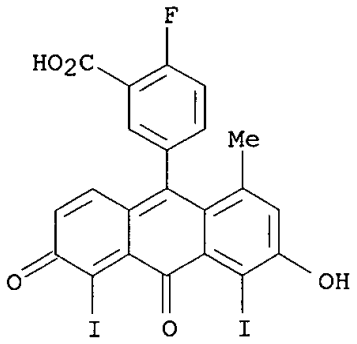
RN 126491-04-1 HCAPLUS
CN Benzoic acid, 2-(4,5-dibromo-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)-5-methoxy- (9CI) (CA INDEX NAME)



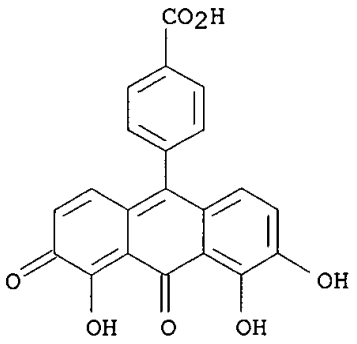
RN 126491-05-2 HCAPLUS
CN Benzoic acid, 5-bromo-2-(3,10-dihydro-6-hydroxy-2,4,5,7-tetraiodo-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



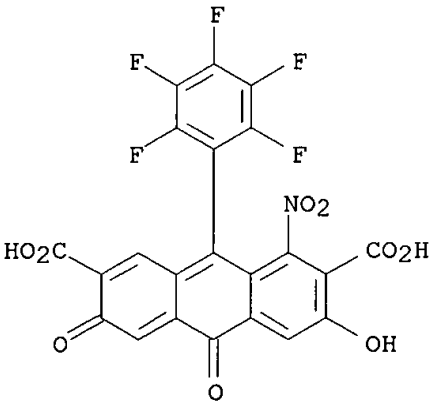
RN 126491-06-3 HCAPLUS
CN Benzoic acid, 5-(6,10-dihydro-3-hydroxy-4,5-diiodo-1-methyl-6,10-dioxo-9-anthracenyl)-2-fluoro- (9CI) (CA INDEX NAME)



RN 126491-07-4 HCAPLUS
CN Benzoic acid, 4-(3,10-dihydro-4,5,6-trihydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)

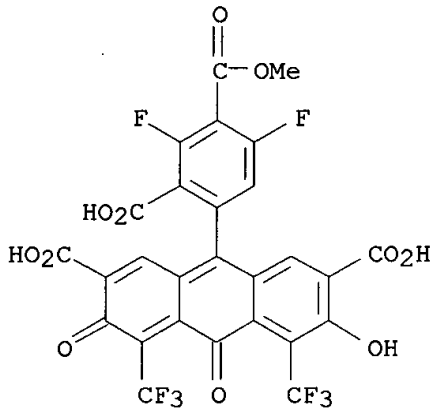


RN 126491-08-5 HCAPLUS
CN 2,7-Anthracenedicarboxylic acid, 6,10-dihydro-3-hydroxy-1-nitro-6,10-dioxo-9-(pentafluorophenyl)- (9CI) (CA INDEX NAME)

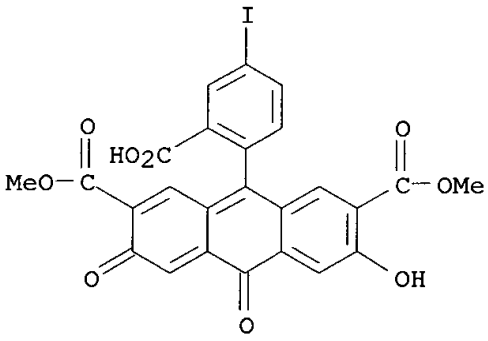


RN 126491-09-6 HCAPLUS
CN 2,7-Anthracenedicarboxylic acid, 9-[2-carboxy-3,5-difluoro-4-(methoxycarbonyl)phenyl]-3,10-dihydro-6-hydroxy-3,10-dioxo-4,5-

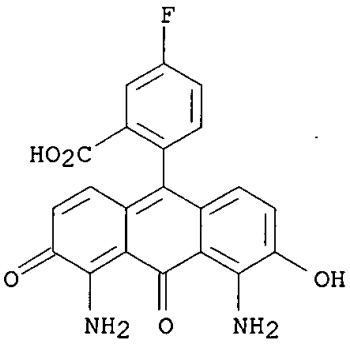
bis(trifluoromethyl)- (9CI) (CA INDEX NAME)



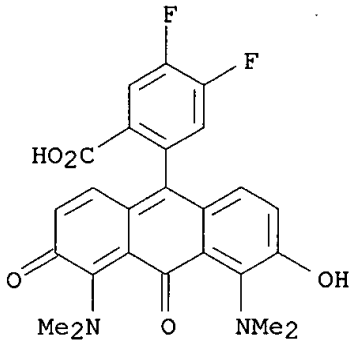
RN 126491-10-9 HCAPLUS
CN 2,7-Anthracenedicarboxylic acid, 9-(2-carboxy-4-iodophenyl)-3,10-dihydro-6-hydroxy-3,10-dioxo-, 2,7-dimethyl ester (9CI) (CA INDEX NAME)



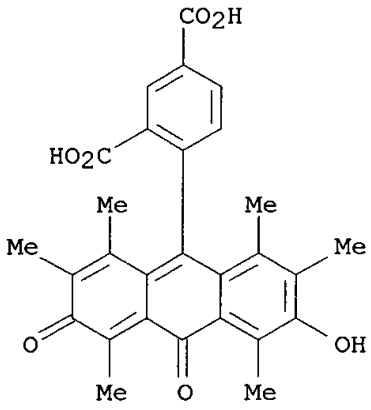
RN 126491-11-0 HCAPLUS
CN Benzoic acid, 2-(4,5-diamino-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)-5-fluoro- (9CI) (CA INDEX NAME)



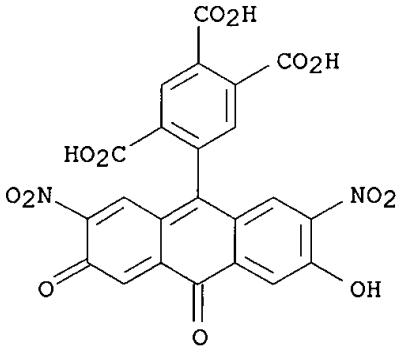
RN 126491-12-1 HCAPLUS
CN Benzoic acid, 2-[4,5-bis(dimethylamino)-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl]-4,5-difluoro- (9CI) (CA INDEX NAME)

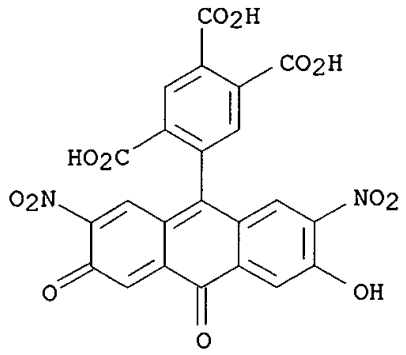


RN 126491-13-2 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 4-(3,10-dihydro-6-hydroxy-1,2,4,5,7,8-hexamethyl-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)

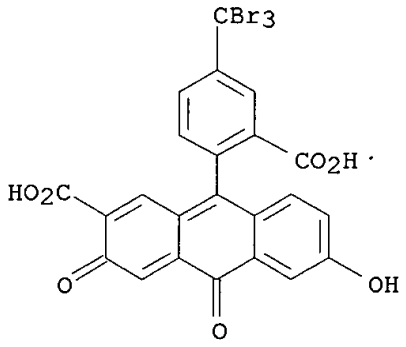


RN 126491-14-3 HCAPLUS
CN 1,2,4-Benzenetricarboxylic acid, 5-(3,10-dihydro-6-hydroxy-2,7-dinitro-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)

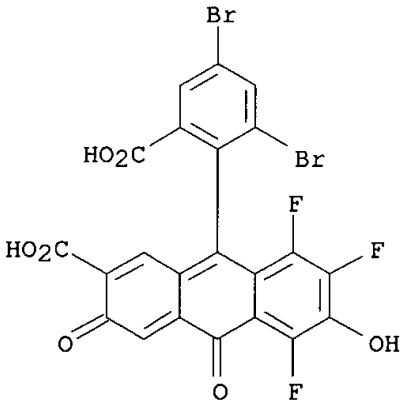




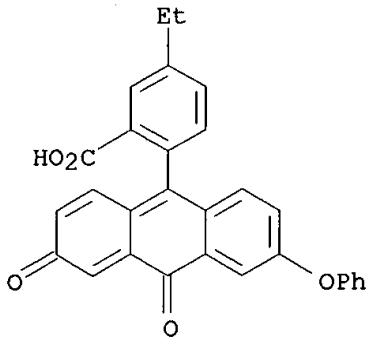
RN 126491-15-4 HCAPLUS
CN 2-Anthracenecarboxylic acid, 9-[2-carboxy-4-(tribromomethyl)phenyl]-3,10-dihydro-6-hydroxy-3,10-dioxo- (9CI) (CA INDEX NAME)



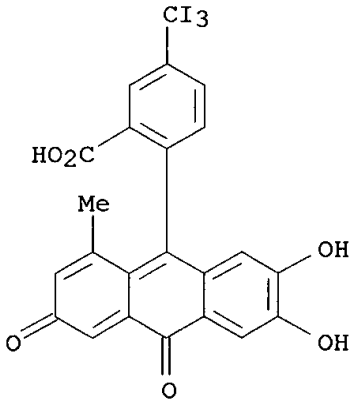
RN 126491-16-5 HCAPLUS
CN 2-Anthracenecarboxylic acid, 9-(2,4-dibromo-6-carboxyphenyl)-5,7,8-trifluoro-3,10-dihydro-6-hydroxy-3,10-dioxo- (9CI) (CA INDEX NAME)



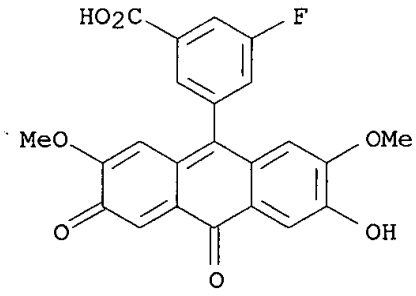
RN 126491-17-6 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-3,10-dioxo-6-phenoxy-9-anthracenyl)-5-ethyl- (9CI) (CA INDEX NAME)



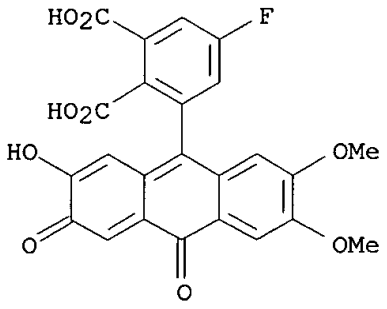
RN 126491-18-7 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-6,7-dihydroxy-1-methyl-3,10-dioxo-9-anthracenyl)-5-(triiodomethyl)- (9CI) (CA INDEX NAME)



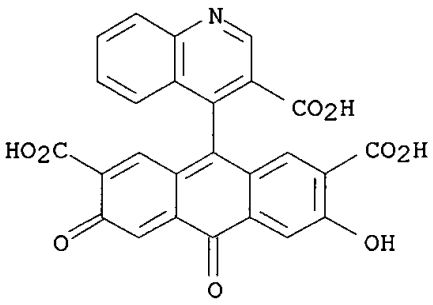
RN 126491-19-8 HCAPLUS
CN Benzoic acid, 3-(3,10-dihydro-6-hydroxy-2,7-dimethoxy-3,10-dioxo-9-anthracenyl)-5-fluoro- (9CI) (CA INDEX NAME)



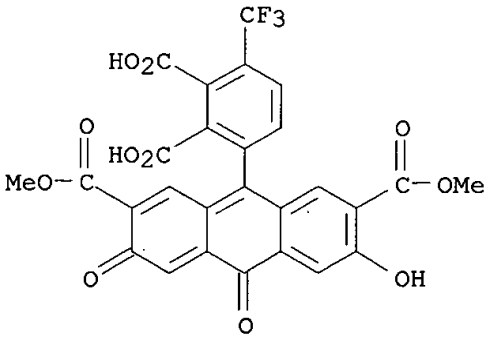
RN 126491-20-1 HCAPLUS
CN 1,2-Benzenedicarboxylic acid, 3-(3,10-dihydro-2-hydroxy-6,7-dimethoxy-3,10-dioxo-9-anthracenyl)-5-fluoro- (9CI) (CA INDEX NAME)



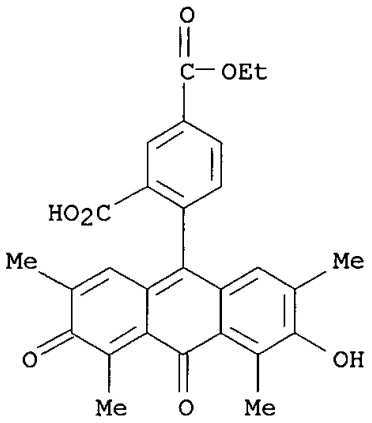
RN 126491-21-2 HCAPLUS
CN 2,7-Anthracenedicarboxylic acid, 9-(3-carboxy-4-quinolinyl)-3,10-dihydro-6-hydroxy-3,10-dioxo- (9CI) (CA INDEX NAME)



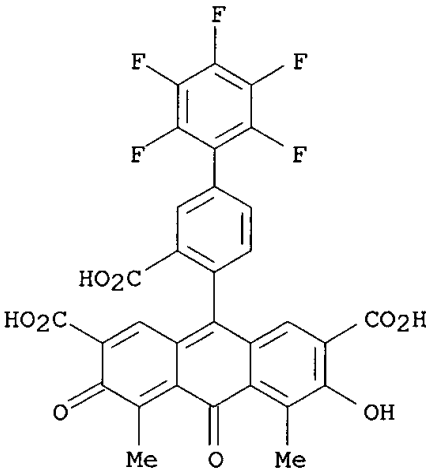
RN 126491-22-3 HCAPLUS
CN 2,7-Anthracenedicarboxylic acid, 9-[2,3-dicarboxy-4-(trifluoromethyl)phenyl]-3,10-dihydro-6-hydroxy-3,10-dioxo-, 2,7-dimethyl ester (9CI) (CA INDEX NAME)



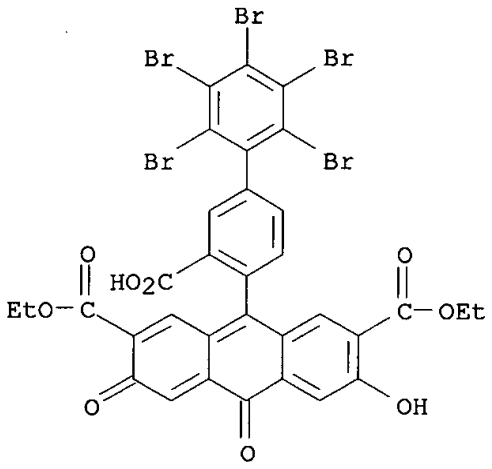
RN 126491-23-4 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, 4-(3,10-dihydro-6-hydroxy-2,4,5,7-tetramethyl-3,10-dioxo-9-anthracenyl)-, 1-ethyl ester (9CI) (CA INDEX NAME)



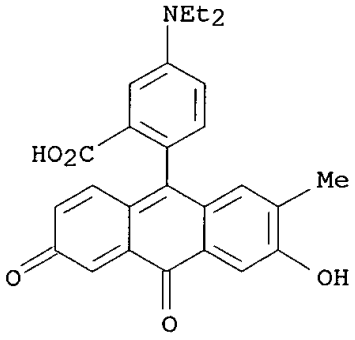
RN 126491-24-5 HCAPLUS
CN 2,7-Anthracenedicarboxylic acid, 9-(3-carboxy-2',3',4',5',6'-pentafluoro[1,1'-biphenyl]-4-yl)-3,10-dihydro-6-hydroxy-4,5-dimethyl-3,10-dioxo- (9CI) (CA INDEX NAME)



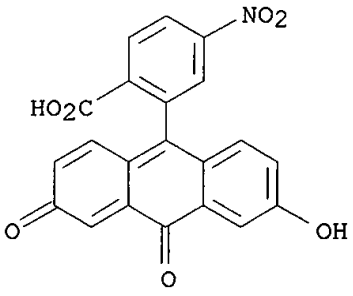
RN 126491-25-6 HCAPLUS
CN 2,7-Anthracenedicarboxylic acid, 9-(2',3',4',5',6'-pentabromo-3-carboxy[1,1'-biphenyl]-4-yl)-3,10-dihydro-6-hydroxy-3,10-dioxo-, 2,7-diethyl ester (9CI) (CA INDEX NAME)



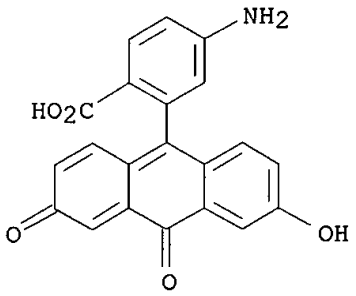
RN 126491-26-7 HCAPLUS
CN Benzoic acid, 5-(diethylamino)-2-(3,10-dihydro-6-hydroxy-7-methyl-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



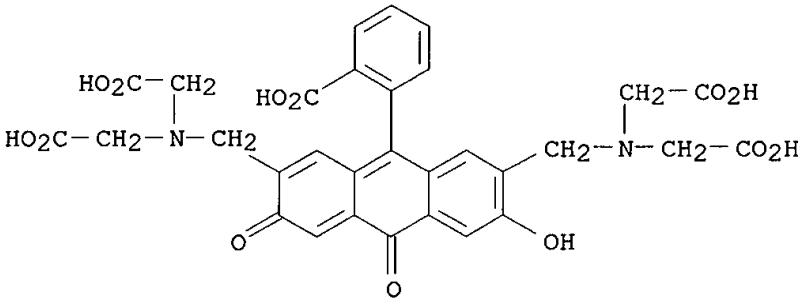
RN 126491-27-8 HCAPLUS
CN Benzoic acid, 2-(3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)-4-nitro- (9CI) (CA INDEX NAME)



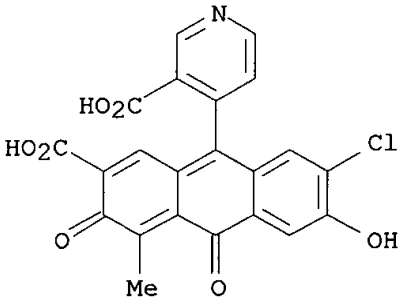
RN 126491-28-9 HCAPLUS
CN Benzoic acid, 4-amino-2-(3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



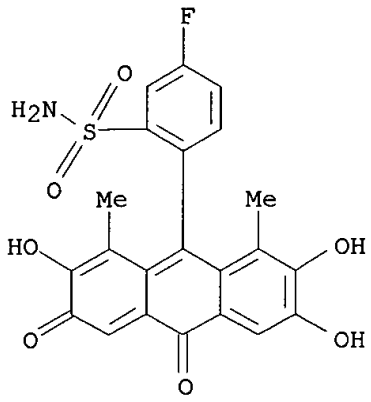
RN 126514-22-5 HCAPLUS
CN Benzoic acid, 2-[2,7-bis[[bis(carboxymethyl)amino]methyl]-3,10-dihydro-6-hydroxy-3,10-dioxo-9-anthracenyl]- (9CI) (CA INDEX NAME)



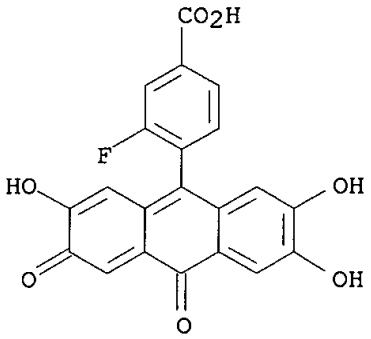
RN 126514-23-6 HCAPLUS
CN 3-Pyridinecarboxylic acid, 4-(2-carboxy-7-chloro-3,10-dihydro-6-hydroxy-4-methyl-3,10-dioxo-9-anthracenyl)- (9CI) (CA INDEX NAME)



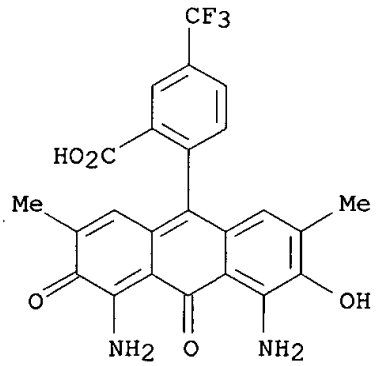
RN 126514-24-7 HCAPLUS
CN Benzenesulfonamide, 2-(3,10-dihydro-2,6,7-trihydroxy-1,8-dimethyl-3,10-dioxo-9-anthracenyl)-5-fluoro- (9CI) (CA INDEX NAME)



RN 126514-25-8 HCAPLUS
CN Benzoic acid, 4-(3,10-dihydro-2,6,7-trihydroxy-3,10-dioxo-9-anthracenyl)-3-fluoro- (9CI) (CA INDEX NAME)



RN 126514-26-9 HCAPLUS
CN Benzoic acid, 2-(4,5-diamino-3,10-dihydro-6-hydroxy-2,7-dimethyl-3,10-dioxo-9-anthracenyl)-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 126514-27-0 HCAPLUS
CN Benzoic acid, 2,3,4,5-tetrabromo-6-(3,10-dihydro-2,6,7-trimethoxy-1,8-

CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

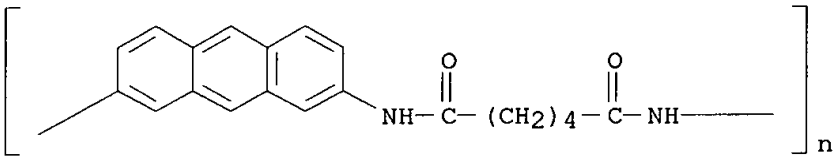
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4281106	A	19810728	US 1979-57113	19790712
US 4371690	A	19830201	US 1981-232566	19810209
GB 2097807	A	19821110	GB 1981-13411	19810430
JP 57190022	A2	19821122	JP 1981-75109	19810520
FR 2506314	A1	19821126	FR 1981-10221	19810522

PRIORITY APPLN. INFO.: US 1979-57113 19790712

AB Compds. I with X = CH2CH2 or CHMeCH2 and R = OH, AcO, CO2Me, or NH2 are used with ClCO(CH2)4COCl (II), m-(ClCO)2C6H4, [4-(ClCO)C6H4OCH2]2, 2,6-(ClCO)2C10H6, HOCH2CH2OH, and/or similar monomers to prep. 14 polyesters and 18 polyamides. The polymers are amorphous, low melting, sol., and tractable and are processed as melts or solns. to give films, fibers, etc., which are heated to eliminate the X group as an olefin, giving relatively intractable anthracenic polymers with high stiffness moduli and good retention of properties at high temps. Thus, 5.45 g II in CH2Cl2 was added to water contg. I (X = CH2CH2, R = OH) 7.14, NaOH 2.7, and Et4NCl 2.3 g to give 8.8 g copolymer [79395-20-3] which was spun at 185.degree. to prep. fibers. Ethylene was eliminated from the copolymer by heating at 280-300.degree., giving polyester fibers with good stability at 350-400.degree. in air.

IT **79395-44-1**
RL: USES (Uses)
(fiber, prepn. of heat-resistant)

RN 79395-44-1 HCAPLUS
CN Poly[imino(1,6-dioxo-1,6-hexanediyl)imino-2,7-anthracenediyl] (9CI) (CA INDEX NAME)



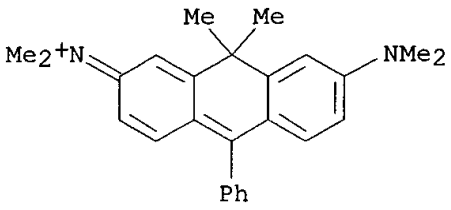
L17 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1976:514369 HCAPLUS
DOCUMENT NUMBER: 85:114369
TITLE: New highly efficient laser dyes
AUTHOR(S): Drexhage, K. H.; Reynolds, G. A.
CORPORATE SOURCE: Res. Lab., Eastman Kodak Co., Rochester, NY, USA
SOURCE: Dig. Tech. Pap. - Int. Quantum Electron. Conf., 8th (1974), 19-20. IEEE: New York, N. Y.
CODEN: 33LPAS
DOCUMENT TYPE: Conference
LANGUAGE: English

AB A no. of new coumarin derivs. were synthesized and a study of their lasing performance in the blue and green spectral regions by using a Sorokin-type

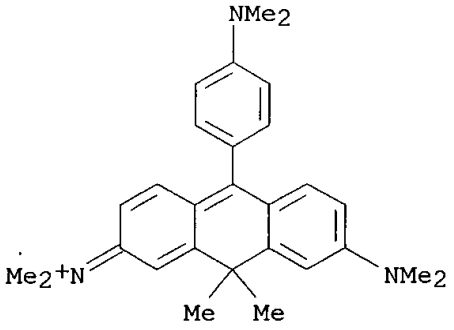
structured compds. The influence of steric and electronic factors on various TPM-dyes is discussed within this framework. This leads to a simple rule involving donor and acceptor properties of mol. subunits, which permits the prediction of fluorescence properties (high quantum efficiency for laser dyes or ultrafast deactivation for saturable absorbers).

IT **17717-41-8 32364-65-1**
RL: PRP (Properties)
(fluorescence quenching of)

RN 17717-41-8 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-10-phenyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



RN 32364-65-1 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-10-[4-(dimethylamino)phenyl]-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



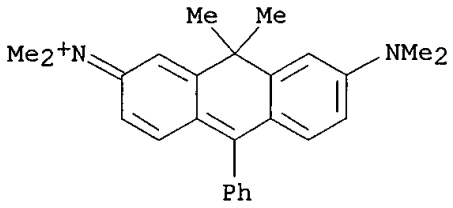
L17 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:115142 HCAPLUS
DOCUMENT NUMBER: 102:115142
TITLE: Laser dyes
INVENTOR(S): Drexhage, Karl Heinz; Harnisch, Horst; Raue, Roderich
PATENT ASSIGNEE(S): Bayer A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 22 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

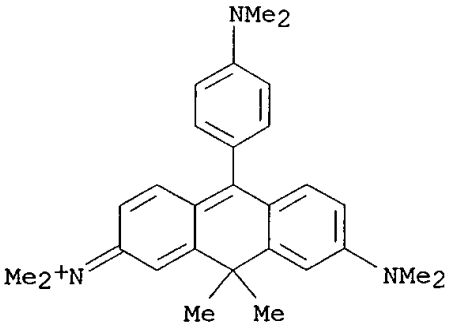
structured compds. The influence of steric and electronic factors on various TPM-dyes is discussed within this framework. This leads to a simple rule involving donor and acceptor properties of mol. subunits, which permits the prediction of fluorescence properties (high quantum efficiency for laser dyes or ultrafast deactivation for saturable absorbers).

IT **17717-41-8 32364-65-1**
RL: PRP (Properties)
(fluorescence quenching of)

RN 17717-41-8 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-10-phenyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



RN 32364-65-1 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-10-[4-(dimethylamino)phenyl]-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



L17 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:115142 HCAPLUS
DOCUMENT NUMBER: 102:115142
TITLE: Laser dyes
INVENTOR(S): Drexhage, Karl Heinz; Harnisch, Horst; Raue, Roderich
PATENT ASSIGNEE(S): Bayer A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 22 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

R: CH, DE, FR, GB, LI

US 4812393	A	19890314	US 1986-824765	19860131
JP 62223147	A2	19871001	JP 1987-18754	19870130
US 4927927	A	19900522	US 1988-278993	19881202

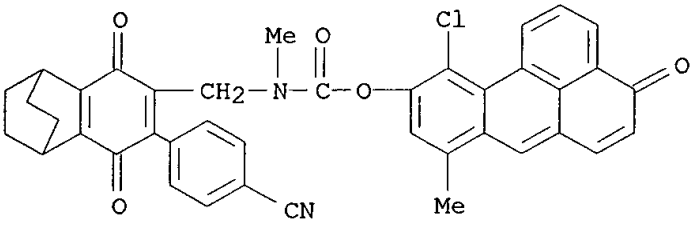
PRIORITY APPLN. INFO.: US 1986-824765 19860131

AB Substituted 4-oxo-4H-benz-[d,e]anthracenes I (R = H, (un)substituted alkyl, hydroxyalkyl, or alkoxycarbonyl; W = H or an electron-withdrawing group; Y = H, heteroatom contg. a lone pair of electrons, neg. charge with assocd. cation) are prepd. for use in assays for, e.g. microorganisms or hydrolytic enzymes. I (R = Me; W = H; Y = H; III) was prepd. by adding 6-methoxydihydrophenalenone in THF to n-Bu-Li in diisopropylamine, followed by refluxing with (2-ethoxy-1,3-pentadienyl)triphenylphosphonium iodide. The suspension was acidified with HCl and ether extd. to isolated the intermediate 4-methoxy-8-methyl-10-oxo-7,8,9,10-tetrahydrobenzo[d,e]anthracene. The intermediate was heated in N,N-DMF in the presence of cupric chloride hydrate and LiCl to yield III.

IT **114311-60-3**
RL: ANST (Analytical study)
(fluorescent dye, for microorganism and hydrolytic enzyme detn.)

RN 114311-60-3 HCAPLUS

CN Carbamic acid, [[7-(4-cyanophenyl)-1,2,3,4,5,8-hexahydro-5,8-dioxo-1,4-ethanonaphthalen-6-yl]methyl]methyl-, 11-chloro-8-methyl-4-oxo-4H-benz[de]anthracen-10-yl ester (9CI) (CA INDEX NAME)



L17 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1986:12504 HCAPLUS

DOCUMENT NUMBER: 104:12504

TITLE: Efficient intramolecular fluorescence quenching in triphenylmethane dyes involving excited states with charge separation and twisted conformations

AUTHOR(S): Vogel, Martin; Rettig, Wolfgang

CORPORATE SOURCE: Iwan-N.-Stranski-Inst. Phys. Theor. Chem., Tech. Univ. Berlin, Berlin, D-1000/12, Fed. Rep. Ger.

SOURCE: Berichte der Bunsen-Gesellschaft (1985), 89(9), 962-8
CODEN: BBPCAX; ISSN: 0005-9021

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The high fluorescence quantum yields .phi.f of most triphenylmethane(TPM)-dyes and C-bridged TPM-dyes in highly viscous solns. (0.3 .ltoreq. .phi.f .ltoreq. 0.8) decrease with increasing temp. by a factor >100, due to viscosity dependent nonradiative deactivation. The deactivation rates krd of bridged model dyes are significantly smaller (by a factor of .ltoreq.170) as compared to krd of the unbridged crystal violet. Application of the twisted intramol. charge transfer (TICT)-model to neutral and ionic TPM-dyes explains the different behavior of similarly

R: CH, DE, FR, GB, LI

US 4812393	A	19890314	US 1986-824765	19860131
JP 62223147	A2	19871001	JP 1987-18754	19870130
US 4927927	A	19900522	US 1988-278993	19881202

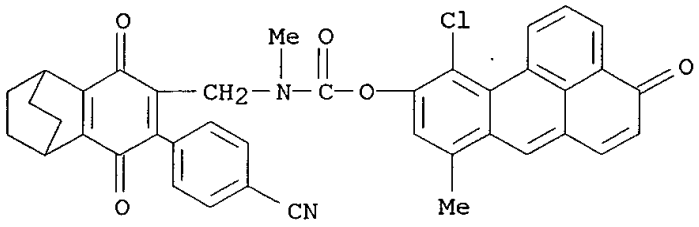
PRIORITY APPLN. INFO.: US 1986-824765 19860131

AB Substituted 4-oxo-4H-benz-[d,e]anthracenes I (R = H, (un)substituted alkyl, hydroxyalkyl, or alkoxycarbonyl; W = H or an electron-withdrawing group; Y = H, heteroatom contg. a lone pair of electrons, neg. charge with assocd. cation) are prepd. for use in assays for, e.g. microorganisms or hydrolytic enzymes. I (R = Me; W = H; Y = H; III) was prepd. by adding 6-methoxydihydrophenalenone in THF to n-Bu-Li in diisopropylamine, followed by refluxing with (2-ethoxy-1,3-pentadienyl)triphenylphosphonium iodide. The suspension was acidified with HCl and ether extd. to isolated the intermediate 4-methoxy-8-methyl-10-oxo-7,8,9,10-tetrahydrobenzo[d,e]anthracene. The intermediate was heated in N,N-DMF in the presence of cupric chloride hydrate and LiCl to yield III.

IT **114311-60-3**
RL: ANST (Analytical study)
(fluorescent dye, for microorganism and hydrolytic enzyme detn.)

RN 114311-60-3 HCAPLUS

CN Carbamic acid, [[7-(4-cyanophenyl)-1,2,3,4,5,8-hexahydro-5,8-dioxo-1,4-ethanonaphthalen-6-yl]methyl]methyl-, 11-chloro-8-methyl-4-oxo-4H-benz[de]anthracen-10-yl ester (9CI) (CA INDEX NAME)



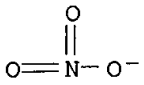
L17 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:	1986:12504 HCAPLUS
DOCUMENT NUMBER:	104:12504
TITLE:	Efficient intramolecular fluorescence quenching in triphenylmethane dyes involving excited states with charge separation and twisted conformations
AUTHOR(S):	Vogel, Martin; Rettig, Wolfgang
CORPORATE SOURCE:	Iwan-N.-Stranski-Inst. Phys. Theor. Chem., Tech. Univ. Berlin, Berlin, D-1000/12, Fed. Rep. Ger.
SOURCE:	Berichte der Bunsen-Gesellschaft (1985), 89(9), 962-8 CODEN: BBPCAX; ISSN: 0005-9021
DOCUMENT TYPE:	Journal
LANGUAGE:	English

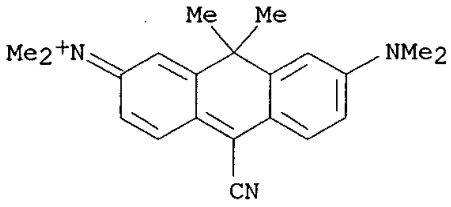
AB The high fluorescence quantum yields .phi.f of most triphenylmethane(TPM)-dyes and C-bridged TPM-dyes in highly viscous solns. (0.3 .ltoreq. .phi.f .ltoreq. 0.8) decrease with increasing temp. by a factor >100, due to viscosity dependent nonradiative deactivation. The deactivation rates krd of bridged model dyes are significantly smaller (by a factor of .ltoreq.170) as compared to krd of the unbridged crystal violet. Application of the twisted intramol. charge transfer (TICT)-model to neutral and ionic TPM-dyes explains the different behavior of similarly

CM 2

CRN 14797-55-8
CMF N O3

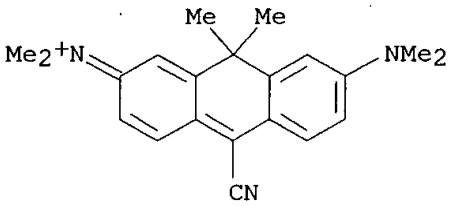


RN 90145-98-5 HCAPLUS
CN Methanaminium, N-[10-cyano-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, bromide (9CI) (CA INDEX NAME)



● Br^-

RN 90145-99-6 HCAPLUS
CN Methanaminium, N-[10-cyano-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

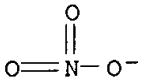


● Cl^-

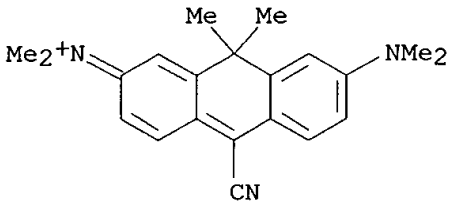
L17 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:53179 HCAPLUS
DOCUMENT NUMBER: 96:53179
TITLE: Heat-resistant, rigid polymers from difunctional 9,10-dihydro-9,10-ethanoanthracenes
INVENTOR(S): Anderson, Burton C.; Frazer, August H.
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co. , USA
SOURCE: U.S., 11 pp.

CM 2

CRN 14797-55-8
CMF N O3

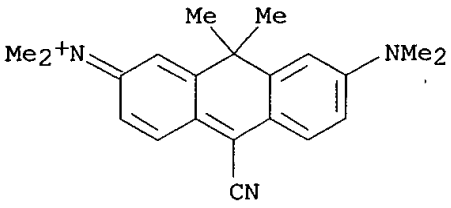


RN 90145-98-5 HCAPLUS
CN Methanaminium, N-[10-cyano-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, bromide (9CI) (CA INDEX NAME)



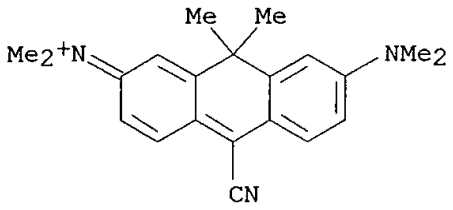
● Br^-

RN 90145-99-6 HCAPLUS
CN Methanaminium, N-[10-cyano-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl^-

L17 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:53179 HCAPLUS
DOCUMENT NUMBER: 96:53179
TITLE: Heat-resistant, rigid polymers from difunctional 9,10-dihydro-9,10-ethanoanthracenes
INVENTOR(S): Anderson, Burton C.; Frazer, August H.
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co. , USA
SOURCE: U.S., 11 pp.



L17 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:195085 HCAPLUS
DOCUMENT NUMBER: 100:195085
TITLE: Dyestuff lasers and light collectors - two new fields of application for fluorescent heterocyclic compounds
AUTHOR(S): Raue, Roderich; Harnisch, Horst; Drexhage, Karl H.
CORPORATE SOURCE: Bayer A.-G., Leverkusen, D-5090, Fed. Rep. Ger.
SOURCE: Heterocycles (1984), 21(1), 167-90
CODEN: HTCYAM; ISSN: 0385-5414
DOCUMENT TYPE: Journal
LANGUAGE: English

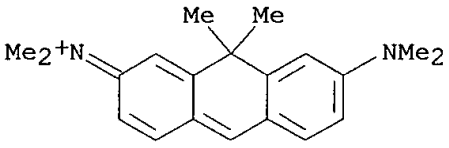
AB Phys. principles and methods of the functioning of fluorescent solar collectors and dye lasers are discussed, together with the demands that have to be met by a fluorescent dye. A report is given of perylene carboxylic ester dyes and perylene tetracarboxylic acid diimide dyes for solar collectors, bifluorophoric laser dyes, laser dyes with intramol. triplet quenching, and IR dyes with pyrylium and thiapyrylium terminal systems, also from the tetra and hexamethine hemicyanine ranges. The effect of cyanogen substitution on the fluorescence quantum yield in coumarin and xanthene dyes was studied. Among the coumarin dyes are compds. suitable as energy converters in light-collecting systems, esp. if the amino group is fixed by ring closure to the arom. system as high-power laser dyes.

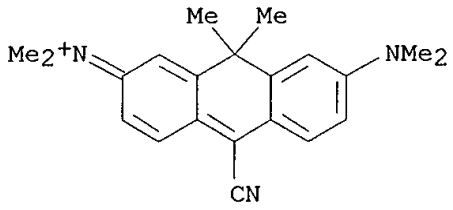
IT **51529-10-3 90145-98-5 90145-99-6**
RL: USES (Uses)
(for lasers and solar collectors, properties of)

RN 51529-10-3 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, nitrate (9CI) (CA INDEX NAME)

CM 1

CRN 17717-35-0
CMF C20 H25 N2





L17 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:195085 HCAPLUS
DOCUMENT NUMBER: 100:195085
TITLE: Dyestuff lasers and light collectors - two new fields of application for fluorescent heterocyclic compounds
AUTHOR(S): Raue, Roderich; Harnisch, Horst; Drexhage, Karl H.
CORPORATE SOURCE: Bayer A.-G., Leverkusen, D-5090, Fed. Rep. Ger.
SOURCE: Heterocycles (1984), 21(1), 167-90
CODEN: HTCYAM; ISSN: 0385-5414
DOCUMENT TYPE: Journal
LANGUAGE: English

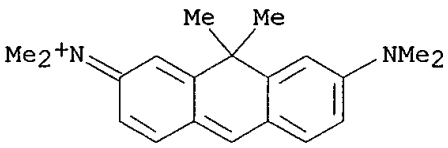
AB Phys. principles and methods of the functioning of fluorescent solar collectors and dye lasers are discussed, together with the demands that have to be met by a fluorescent dye. A report is given of perylene carboxylic ester dyes and perylene tetracarboxylic acid diimide dyes for solar collectors, bifluorophoric laser dyes, laser dyes with intramol. triplet quenching, and IR dyes with pyrylium and thiapyrylium terminal systems, also from the tetra and hexamethine hemicyanine ranges. The effect of cyanogen substitution on the fluorescence quantum yield in coumarin and xanthene dyes was studied. Among the coumarin dyes are compds. suitable as energy converters in light-collecting systems, esp. if the amino group is fixed by ring closure to the arom. system as high-power laser dyes.

IT **51529-10-3 90145-98-5 90145-99-6**
RL: USES (Uses)
(for lasers and solar collectors, properties of)

RN 51529-10-3 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, nitrate (9CI) (CA INDEX NAME)

CM 1

CRN 17717-35-0
CMF C20 H25 N2



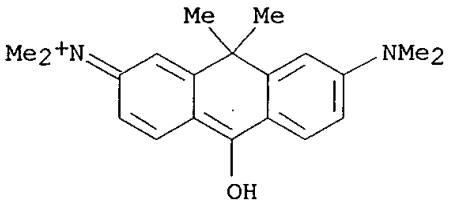
Electronic absorption spectra of julolidine(2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizine) and kairoline (1-methyl-1,2,3,4-tetrahydroquinoline) analogs of Michler's Hydrol Blue, Malachite Green, Crystal Violet, and Michler's ketone

AUTHOR(S): Barker, Charles C.; Hallas, G.
CORPORATE SOURCE: Univ. Hull, Hull, UK
SOURCE: Journal of the Chemical Society [Section] B: Physical Organic (1969), (9), 1068-71
CODEN: JCSPAC; ISSN: 0045-6470
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Julolidine and kairoline analogs of some basic di- and triphenylmethane dy es and of Michler's ketone have been prepd. and their spectra have been examd. The analogs of Michler's ketone in acid soln. give charge-resonance systems by protonation of the oxygen atom, and it is suggested that nitrogen in these compds. may be sp2-hybridized.

IT **26093-05-0**
RL: PRP (Properties)
(spectrum of, v and uv)

RN 26093-05-0 HCAPLUS
CN Ammonium, [7-(dimethylamino)-10-hydroxy-9,9-dimethyl-2(9H)-anthrylidene]dimethyl- (8CI) (CA INDEX NAME)



L17 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1967:60491 HCAPLUS
DOCUMENT NUMBER: 66:60491
TITLE: Electronic abosrption spectrum of the .alpha.-1-adamantyl derivative of Michler's Hydrol Blue
AUTHOR(S): Hallas, Geoffrey
CORPORATE SOURCE: Univ. Leeds, Leeds, UK
SOURCE: Journal of the Chemical Society [Section] B: Physical Organic (1967), (1), 91-2
CODEN: JCSPAC; ISSN: 0045-6470
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The close similarity between the absorption spectrum of the .alpha.-1-adamantyl deriv. of Michler's Hydrol Blue and that of the .alpha.-tert-butyl deriv. strikingly confirms the view that mol. crowding in the latter causes partial deconjugation of one of the dimethylaminophenyl groups.

IT **15389-09-0**
RL: PRP (Properties)
(spectrum (visible) of, deconjugation and)

RN 15389-09-0 HCAPLUS

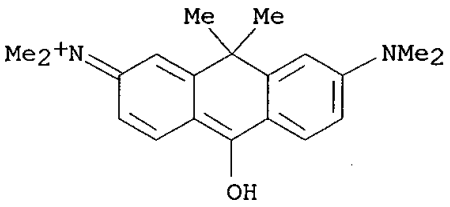
Electronic absorption spectra of julolidine(2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizine) and kairoline (1-methyl-1,2,3,4-tetrahydroquinoline) analogs of Michler's Hydrol Blue, Malachite Green, Crystal Violet, and Michler's ketone

AUTHOR(S): Barker, Charles C.; Hallas, G.
CORPORATE SOURCE: Univ. Hull, Hull, UK
SOURCE: Journal of the Chemical Society [Section] B: Physical Organic (1969), (9), 1068-71
CODEN: JCSPAC; ISSN: 0045-6470
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Julolidine and kairoline analogs of some basic di- and triphenylmethane dy es and of Michler's ketone have been prepd. and their spectra have been examd. The analogs of Michler's ketone in acid soln. give charge-resonance systems by protonation of the oxygen atom, and it is suggested that nitrogen in these compds. may be sp2-hybridized.

IT **26093-05-0**
RL: PRP (Properties)
(spectrum of, v and uv)

RN 26093-05-0 HCAPLUS
CN Ammonium, [7-(dimethylamino)-10-hydroxy-9,9-dimethyl-2(9H)-anthrylidene]dimethyl- (8CI) (CA INDEX NAME)

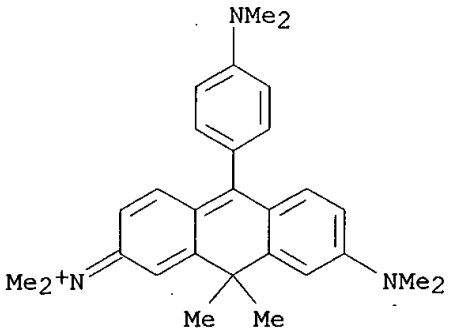


L17 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1967:60491 HCAPLUS
DOCUMENT NUMBER: 66:60491
TITLE: Electronic abosrption spectrum of the .alpha.-1-adamantyl derivative of Michler's Hydrol Blue
AUTHOR(S): Hallas, Geoffrey
CORPORATE SOURCE: Univ. Leeds, Leeds, UK
SOURCE: Journal of the Chemical Society [Section] B: Physical Organic (1967), (1), 91-2
CODEN: JCSPAC; ISSN: 0045-6470
DOCUMENT TYPE: Journal
LANGUAGE: English

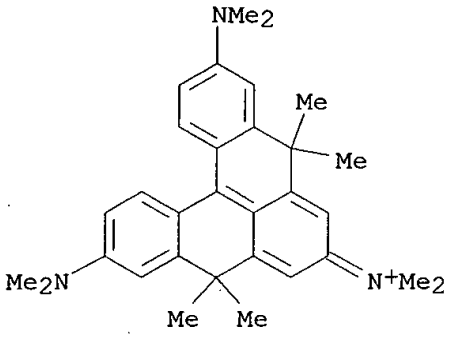
AB The close similarity between the absorption spectrum of the .alpha.-1-adamantyl deriv. of Michler's Hydrol Blue and that of the .alpha.-tert-butyl deriv. strikingly confirms the view that mol. crowding in the latter causes partial deconjugation of one of the dimethylaminophenyl groups.

IT **15389-09-0**
RL: PRP (Properties)
(spectrum (visible) of, deconjugation and)

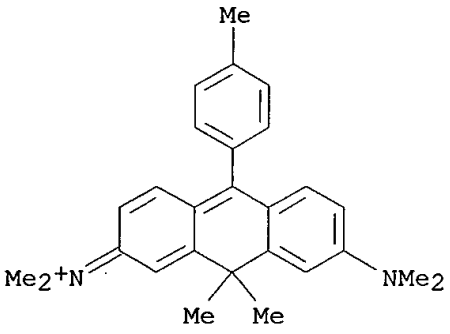
RN 15389-09-0 HCAPLUS



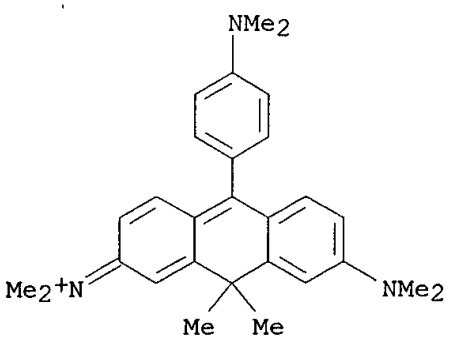
RN 32364-66-2 HCAPLUS
CN Ammonium, [3,11-bis(dimethylamino)-5,5,9,9-tetramethyl-5H-naphth[3,2,1-de]anthracen-7(9H)-ylidene]dimethyl- (8CI) (CA INDEX NAME)



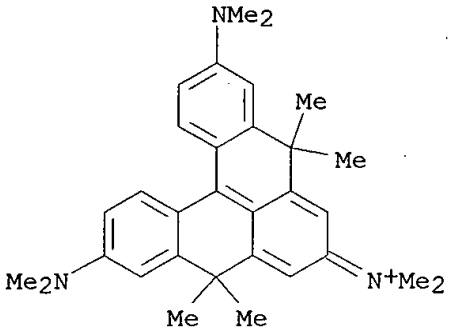
RN 32664-93-0 HCAPLUS
CN Ammonium, [7-(dimethylamino)-9,9-dimethyl-10-p-tolyl-2(9H)-anthrylidene]dimethyl- (8CI) (CA INDEX NAME)



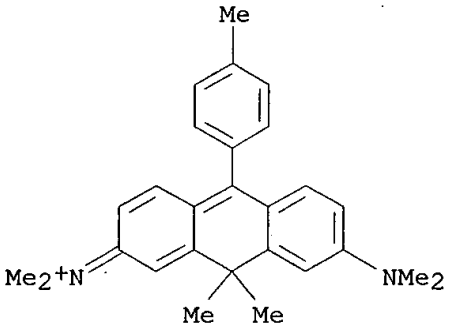
L17 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1970:44996 HCAPLUS
DOCUMENT NUMBER: 72:44996
TITLE: Steric effects in di- and triarylmethanes. IX.



RN 32364-66-2 HCAPLUS
CN Ammonium, [3,11-bis(dimethylamino)-5,5,9,9-tetramethyl-5H-naphth[3,2,1-de]anthracen-7(9H)-ylidene]dimethyl- (8CI) (CA INDEX NAME)



RN 32664-93-0 HCAPLUS
CN Ammonium, [7-(dimethylamino)-9,9-dimethyl-10-p-tolyl-2(9H)-anthrylidene]dimethyl- (8CI) (CA INDEX NAME)



L17 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1970:44996 HCAPLUS
DOCUMENT NUMBER: 72:44996
TITLE: Steric effects in di- and triarylmethanes. IX.

R: CH, DE, FR, GB, LI

US 4812393	A	19890314	US 1986-824765	19860131
JP 62223147	A2	19871001	JP 1987-18754	19870130
US 4927927	A	19900522	US 1988-278993	19881202

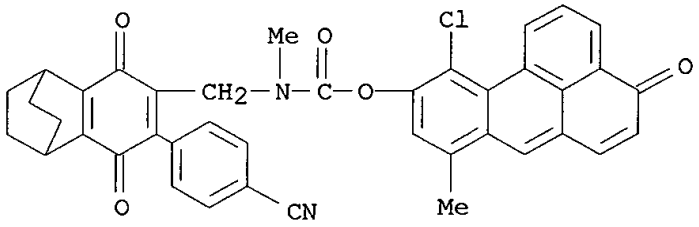
PRIORITY APPLN. INFO.: US 1986-824765 19860131

AB Substituted 4-oxo-4H-benz-[d,e]anthracenes I (R = H, (un)substituted alkyl, hydroxyalkyl, or alkoxycarbonyl; W = H or an electron-withdrawing group; Y = H, heteroatom contg. a lone pair of electrons, neg. charge with assocd. cation) are prepd. for use in assays for, e.g. microorganisms or hydrolytic enzymes. I (R = Me; W = H; Y = H; III) was prepd. by adding 6-methoxydihydrophenalenone in THF to n-Bu-Li in diisopropylamine, followed by refluxing with (2-ethoxy-1,3-pentadienyl)triphenylphosphonium iodide. The suspension was acidified with HCl and ether extd. to isolated the intermediate 4-methoxy-8-methyl-10-oxo-7,8,9,10-tetrahydrobenzo[d,e]anthracene. The intermediate was heated in N,N-DMF in the presence of cupric chloride hydrate and LiCl to yield III.

IT **114311-60-3**
RL: ANST (Analytical study)
(fluorescent dye, for microorganism and hydrolytic enzyme detn.)

RN 114311-60-3 HCAPLUS

CN Carbamic acid, [[7-(4-cyanophenyl)-1,2,3,4,5,8-hexahydro-5,8-dioxo-1,4-ethanonaphthalen-6-yl]methyl]methyl-, 11-chloro-8-methyl-4-oxo-4H-benz[de]anthracen-10-yl ester (9CI) (CA INDEX NAME)



L17 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2003 ACS

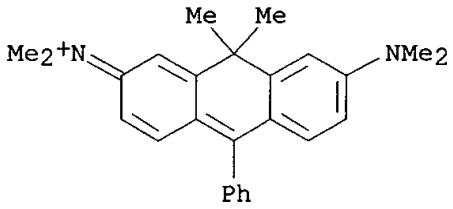
ACCESSION NUMBER:	1986:12504 HCAPLUS
DOCUMENT NUMBER:	104:12504
TITLE:	Efficient intramolecular fluorescence quenching in triphenylmethane dyes involving excited states with charge separation and twisted conformations
AUTHOR(S):	Vogel, Martin; Rettig, Wolfgang
CORPORATE SOURCE:	Iwan-N.-Stranski-Inst. Phys. Theor. Chem., Tech. Univ. Berlin, Berlin, D-1000/12, Fed. Rep. Ger.
SOURCE:	Berichte der Bunsen-Gesellschaft (1985), 89(9), 962-8 CODEN: BBPCAX; ISSN: 0005-9021
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB The high fluorescence quantum yields .phi.f of most triphenylmethane(TPM)-dyes and C-bridged TPM-dyes in highly viscous solns. (0.3 .ltoreq. .phi.f .ltoreq. 0.8) decrease with increasing temp. by a factor >100, due to viscosity dependent nonradiative deactivation. The deactivation rates krd of bridged model dyes are significantly smaller (by a factor of .ltoreq.170) as compared to krd of the unbridged crystal violet. Application of the twisted intramol. charge transfer (TICT)-model to neutral and ionic TPM-dyes explains the different behavior of similarly

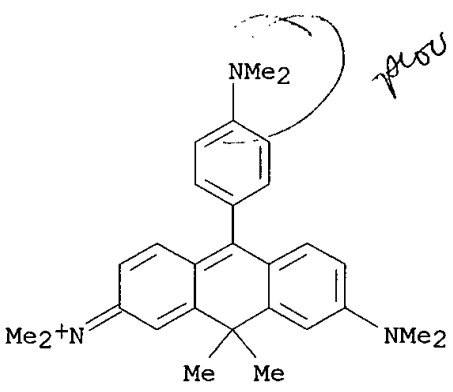
structured compds. The influence of steric and electronic factors on various TPM-dyes is discussed within this framework. This leads to a simple rule involving donor and acceptor properties of mol. subunits, which permits the prediction of fluorescence properties (high quantum efficiency for laser dyes or ultrafast deactivation for saturable absorbers).

IT **17717-41-8 32364-65-1**
RL: PRP (Properties)
(fluorescence quenching of)

RN 17717-41-8 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-10-phenyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)

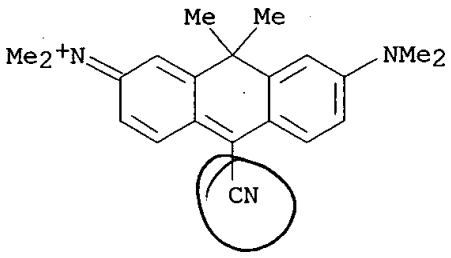


RN 32364-65-1 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-10-[4-(dimethylamino)phenyl]-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



L17 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:115142 HCAPLUS
DOCUMENT NUMBER: 102:115142
TITLE: Laser dyes
INVENTOR(S): Drexhage, Karl Heinz; Harnisch, Horst; Raue, Roderich
PATENT ASSIGNEE(S): Bayer A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 22 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE



● Br^-

L17 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:195085 HCAPLUS
DOCUMENT NUMBER: 100:195085
TITLE: Dyestuff lasers and light collectors - two new fields of application for fluorescent heterocyclic compounds
AUTHOR(S): Raue, Roderich; Harnisch, Horst; Drexhage, Karl H.
CORPORATE SOURCE: Bayer A.-G., Leverkusen, D-5090, Fed. Rep. Ger.
SOURCE: Heterocycles (1984), 21(1), 167-90
CODEN: HTCYAM; ISSN: 0385-5414
DOCUMENT TYPE: Journal
LANGUAGE: English

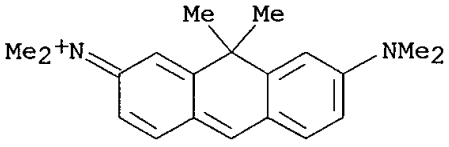
AB Phys. principles and methods of the functioning of fluorescent solar collectors and dye lasers are discussed, together with the demands that have to be met by a fluorescent dye. A report is given of perylene carboxylic ester dyes and perylene tetracarboxylic acid diimide dyes for solar collectors, bifluorophoric laser dyes, laser dyes with intramol. triplet quenching, and IR dyes with pyrylium and thiapyrylium terminal systems, also from the tetra and hexamethine hemicyanine ranges. The effect of cyanogen substitution on the fluorescence quantum yield in coumarin and xanthene dyes was studied. Among the coumarin dyes are compds. suitable as energy converters in light-collecting systems, esp. if the amino group is fixed by ring closure to the arom. system as high-power laser dyes.

IT **51529-10-3 90145-98-5 90145-99-6**
RL: USES (Uses)
(for lasers and solar collectors, properties of)

RN 51529-10-3 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, nitrate (9CI) (CA INDEX NAME)

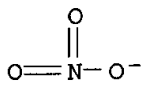
CM 1

CRN 17717-35-0
CMF C20 H25 N2

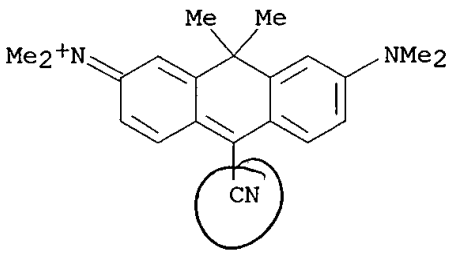


CM 2

CRN 14797-55-8
CMF N O3

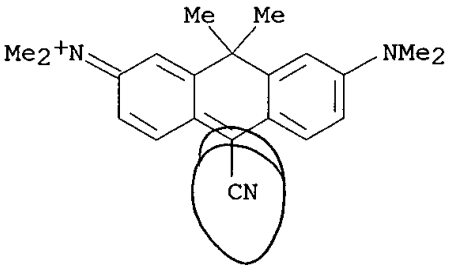


RN 90145-98-5 HCAPLUS
CN Methanaminium, N-[10-cyano-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, bromide (9CI) (CA INDEX NAME)



● Br^-

RN 90145-99-6 HCAPLUS
CN Methanaminium, N-[10-cyano-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl^-

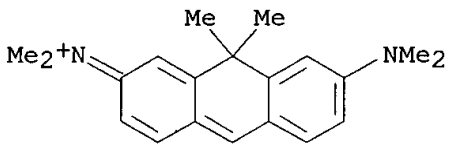
L17 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:53179 HCAPLUS
DOCUMENT NUMBER: 96:53179
TITLE: Heat-resistant, rigid polymers from difunctional 9,10-dihydro-9,10-ethanoanthracenes
INVENTOR(S): Anderson, Burton C.; Frazer, August H.
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co. , USA
SOURCE: U.S., 11 pp.

air-flashlamp laser showed that the threshold values of the new coumarins compared favorably with those of the well-known derivs. New laser dyes for the red and near ir regions were also synthesized, e.g., oxazine 170, carbopyronin 149, and carbazine 122, which lase flashlamp-pumped with a very low threshold untuned between 650 and 750 nm.

IT **17717-35-0**
RL: DEV (Device component use); USES (Uses)
(laser)

RN 17717-35-0 HCAPLUS

CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



L17 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1974:76587 HCAPLUS
DOCUMENT NUMBER: 80:76587
TITLE: Laser dye composition
INVENTOR(S): Drexhage, Karl H.; Reynolds, George A.
PATENT ASSIGNEE(S): Eastman Kodak Co.
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3781711	A	19731225	US 1972-298057	19721016
FR 2202920	A1	19740510	FR 1973-35936	19731009
DE 2351142	A1	19740502	DE 1973-2351142	19731011
JP 49074895	A2	19740719	JP 1973-115405	19731016

PRIORITY APPLN. INFO.: US 1972-298057 19721016

AB Solns. of salts of rigidized diphenyl and triphenylmethane dyes and their aza derivs. (I, X = :CR4 or N) lase in the red and near ir regions (600-800 nm) where few other dyes lase. Thus, the Et3NH+ salt of 7-hydroxy-2',3',5',6'-tetramethylspiro(acridine-9,1'-cyclohexa-2',5'-diene)-2,4'(9H)-dione (II) in MeOH lases at 720 nm. Other dyes which lase in this region are the Na salt of II, the Et3NH+ salt of 7-hydroxy-2'-methyl-5'-isopropylspiro(acridine-9,1'-cyclohexa-2',5'-diene)-2,4'(9H)-dione; 9,9-dimethyl-2-dimethylamino-7H,9H-anthracene-7-dimethylinium nitrate; and 7-amino-9,9-diphenyl-2(9H)-acridinylideneiminium chloride.

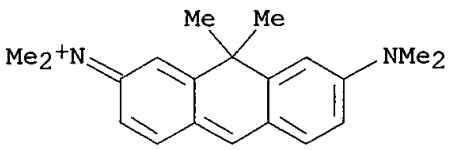
IT **51529-10-3**
RL: DEV (Device component use); USES (Uses)
(lasers)

RN 51529-10-3 HCAPLUS

CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl-, nitrate (9CI) (CA INDEX NAME)

CM 1

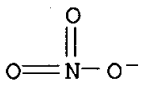
CRN 17717-35-0
CMF C20 H25 N2



prior art

CM 2

CRN 14797-55-8
CMF N O3

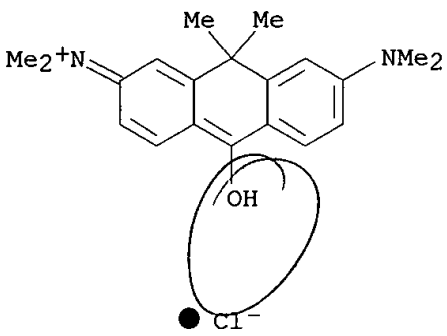


L17 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1972:73616 HCAPLUS
DOCUMENT NUMBER: 76:73616
TITLE: Fiber- and film-forming quinoxaline-anthraquinone polymers
INVENTOR(S): Marvel, Carl S.
PATENT ASSIGNEE(S): Research Corp.
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3620997	A	19711116	US 1969-885277	19691215

PRIORITY APPLN. INFO.: US 1969-885277 19691215

AB Heat-resistant quinoxaline deriv. polymers are prepd. by melt or soln. polymn. of 1,2,5,6-tetraaminoanthraquinone (I) with 2,3,6,7-tetrachloro-1,4,5,8-tetraazaanthracene (II) [3604-51-1] or tetrachlorodiquinoxaline derivs. Catalytic hydrogenation of 10 g 4,6-dinitro m-phenylenediamine over Pd and refluxing the resulting amine with 20 g oxalic acid in concd. HCl 3 hr gives a nearly quant. yield of 1,4,5,8-tetraazaanthracene-2,3,6,7-tetraol, refluxing of 12.3 g of which with 62 g POCl3 and 123 g SbCl3 7 hr gives 5.2 g II. Refluxing 1.73 g I and 2.1 g II in 55 ml pyridine 2 hr gives poly[5,9,14,18-tetrahydrobenzo[1'',2'':5,6:4'',5'':5',6']dipyrazino[2,3-b:2',3'-b']diquinoxaline-1,2:10,11-tetrayl)-10,11-dicarbonyl] (III) [**31631-39-7**], inherent viscosity (H2SO4, 30.deg.) 0.44. The polymer showed minimal wt. loss at temps. <400.deg..

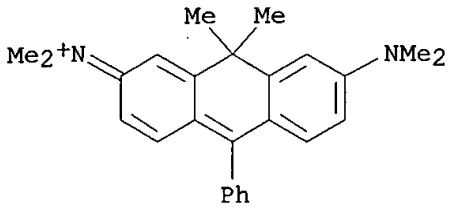


L17 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1971:111455 HCAPLUS
DOCUMENT NUMBER: 74:111455
TITLE: Steric effects in di- and tri-arylmethane dyes. X. Electronic absorption spectra of bridged derivatives of malachite green and crystal violet
AUTHOR(S): Barker, Charles C.; Aaron, Colin
CORPORATE SOURCE: Dep. Chem., Univ. Hull, Hull, UK
SOURCE: Journal of the Chemical Society [Section] B: Physical Organic (1971), (2), 319-24
CODEN: JCSPAC; ISSN: 0045-6470
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The compds. (I; R1 = R2 = R3 = H, R4 = NMe2; R1 = R2 = H, R3 = Me, R4 = NMe2; R1 = Me, R2 = R3 = H, R4 = NMe2; R1 = R2 = Me, R3 = H, R4 = NMe2; R1 = CMe3, R2 = R3 = H, R4 = NMe2; R1 = R2 = H, R3 = R4 = NMe2; R1 = R2 = R4 = H, R3 = NMe2) and (II; R = H and R = NMe2), which are derived from malachite green (III) or Crystal Violet (IV) by introduction of the isopropylidene group, were prepd. in order to det. mol. conformation. Electronic absorption spectra of the dyes were recorded, and their bearing on intensity variations of the first band of ortho derivs. of III was discussed. Introduction of two isopropylidene bridges into III and IV produced bathochromic shifts that were attributed to distortion of the aryl nuclei. Mol. planarity, enforced by introduction of a 4,2'-isopropylidene bridge into 2,7-bis(dimethylamino)-10-[p-(dimethylamino)phenyl]anthracene to give V, stabilized the cation formed by C-9 protonation of the anthracene system so that in 98% AcOH about 60% of V is so protonated.

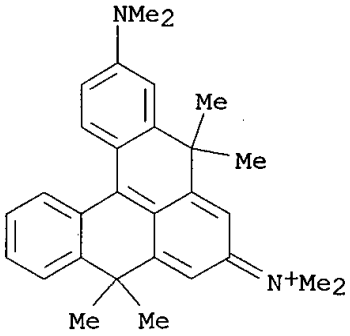
IT **17717-41-8 17717-42-9 32364-60-6 32364-61-7 32364-62-8 32364-65-1 32364-66-2 32664-93-0**
RL: PRP (Properties)
(conformation of, uv spectrum in relation to)

RN 17717-41-8 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-10-phenyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



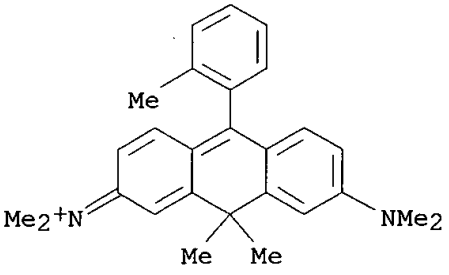
proviso

RN 17717-42-9 HCAPLUS
CN Ammonium, [3-(dimethylamino)-5,5,9,9-tetramethyl-5H-naphth[3,2,1-de]anthracen-7(9H)-ylidene]dimethyl- (8CI) (CA INDEX NAME)



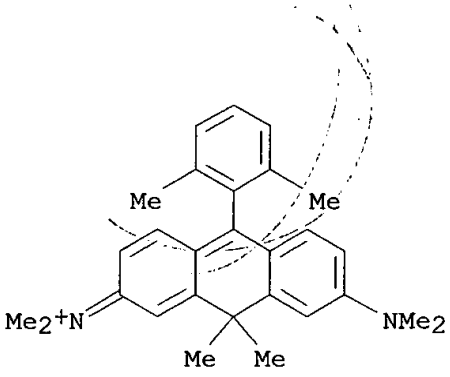
R3+R4 = ring system

RN 32364-60-6 HCAPLUS
CN Ammonium, [7-(dimethylamino)-9,9-dimethyl-10-o-tolyl-2(9H)-anthrylidene]dimethyl- (8CI) (CA INDEX NAME)



proviso tolyl

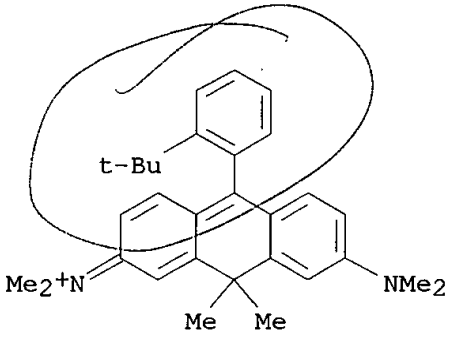
RN 32364-61-7 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-10-(2,6-dimethylphenyl)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



RN 32364-62-8 HCAPLUS
CN Ammonium, [10-(o-tert-butylphenyl)-7-(dimethylamino)-9,9-dimethyl-2(9H)-anthrylidene]dimethyl-, perchlorate (8CI) (CA INDEX NAME)

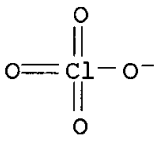
CM 1

CRN 47699-86-5
CMF C30 H37 N2

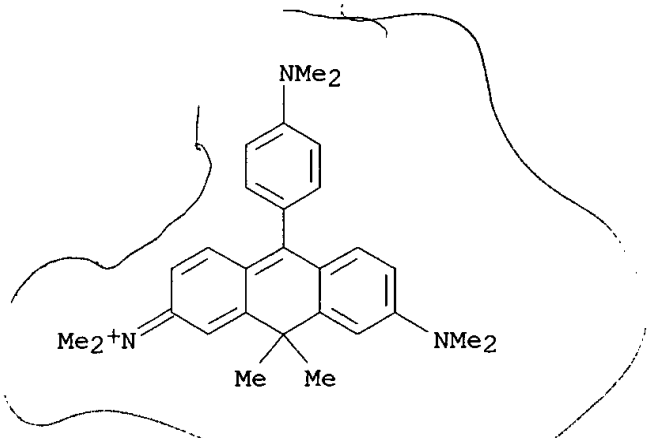


CM 2

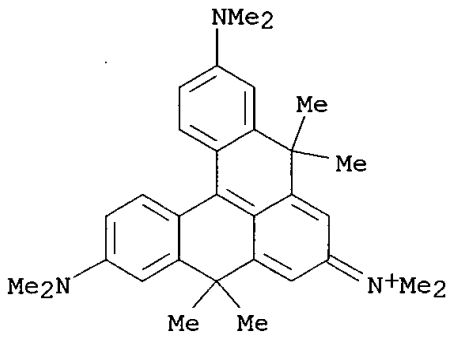
CRN 14797-73-0
CMF Cl O4



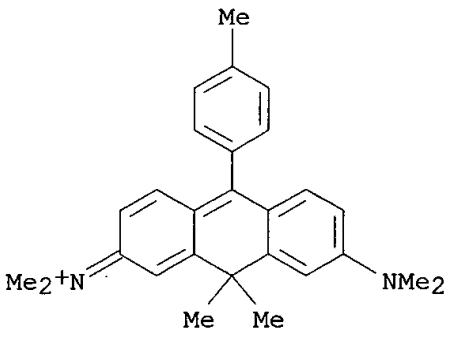
RN 32364-65-1 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-10-[4-(dimethylamino)phenyl]-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



RN 32364-66-2 HCAPLUS
CN Ammonium, [3,11-bis(dimethylamino)-5,5,9,9-tetramethyl-5H-naphth[3,2,1-de]anthracen-7(9H)-ylidene]dimethyl- (8CI) (CA INDEX NAME)



RN 32664-93-0 HCAPLUS
CN Ammonium, [7-(dimethylamino)-9,9-dimethyl-10-p-tolyl-2(9H)-anthrylidene]dimethyl- (8CI) (CA INDEX NAME)



L17 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1970:44996 HCAPLUS
DOCUMENT NUMBER: 72:44996
TITLE: Steric effects in di- and triarylmethanes. IX.

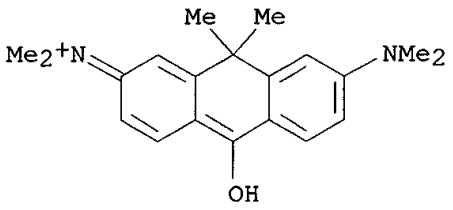
Electronic absorption spectra of julolidine(2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizine) and kairoline (1-methyl-1,2,3,4-tetrahydroquinoline) analogs of Michler's Hydrol Blue, Malachite Green, Crystal Violet, and Michler's ketone

AUTHOR(S): Barker, Charles C.; Hallas, G.
CORPORATE SOURCE: Univ. Hull, Hull, UK
SOURCE: Journal of the Chemical Society [Section] B: Physical Organic (1969), (9), 1068-71
CODEN: JCSPAC; ISSN: 0045-6470
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Julolidine and kairoline analogs of some basic di- and triphenylmethane dyes and of Michler's ketone have been prepd. and their spectra have been examd. The analogs of Michler's ketone in acid soln. give charge-resonance systems by protonation of the oxygen atom, and it is suggested that nitrogen in these compds. may be sp2-hybridized.

IT **26093-05-0**
RL: PRP (Properties)
(spectrum of, v and uv)

RN 26093-05-0 HCAPLUS
CN Ammonium, [7-(dimethylamino)-10-hydroxy-9,9-dimethyl-2(9H)-anthrylidene]dimethyl- (8CI) (CA INDEX NAME)



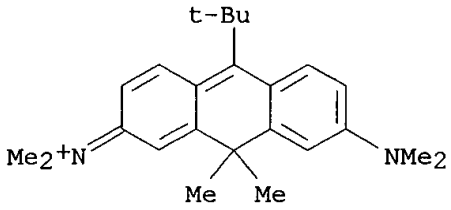
L17 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1967:60491 HCAPLUS
DOCUMENT NUMBER: 66:60491
TITLE: Electronic abosrption spectrum of the .alpha.-1-adamantyl derivative of Michler's Hydrol Blue
AUTHOR(S): Hallas, Geoffrey
CORPORATE SOURCE: Univ. Leeds, Leeds, UK
SOURCE: Journal of the Chemical Society [Section] B: Physical Organic (1967), (1), 91-2
CODEN: JCSPAC; ISSN: 0045-6470
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The close similarity between the absorption spectrum of the .alpha.-1-adamantyl deriv. of Michler's Hydrol Blue and that of the .alpha.-tert-butyl deriv. strikingly confirms the view that mol. crowding in the latter causes partial deconjugation of one of the dimethylaminophenyl groups.

IT **15389-09-0**
RL: PRP (Properties)
(spectrum (visible) of, deconjugation and)

RN 15389-09-0 HCAPLUS

CN Ammonium, [10-tert-butyl-7-(dimethylamino)-8a,10a-dihydro-9,9-dimethyl-2(9H)-anthrylidene]dimethyl- (8CI) (CA INDEX NAME)



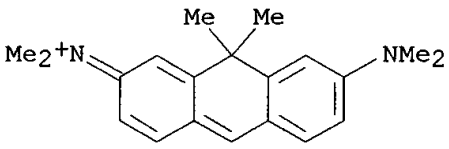
L17 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1963:80897 HCAPLUS
DOCUMENT NUMBER: 58:80897
ORIGINAL REFERENCE NO.: 58:13750g-h,13751a-b
TITLE: Steric effects in di- and triarylmethanes. VIII. Electronic absorption spectra of planar derivatives of Michler's Hydrol Blue
AUTHOR(S): Aaron, C.; Barker, C. C.
CORPORATE SOURCE: Univ. Hull, UK
SOURCE: J. Chem. Soc. (1963) 2655-62
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. CA 56, 3382e. Planarity has been enforced in Michler's Hydrol Blue and its .alpha.-alkyl derivs. by the introduction of an isopropylidene bridge at the 2,2'-positions. The .alpha.-tert-Bu deriv. (I) does not show an anomalous second-frequency absorption band, thus confirming the view that the anomalous band shown by the unbridged .alpha.-tert-Bu deriv. (II) is due to a non-degenerate, protonated cation (III) formed because mol. crowding causes partial deconjugation of one of the dimethylaminophenyl groups. Indirectly, the view that the anomalous second-frequency bands of dimerized .alpha.-alkyl derivs. of Michler's Hydrol Blue are due to non-degenerate, protonated cations (IV) is thereby supported. General mol. distortion in the bridged .alpha.-tert-Bu deriv. produces a larger bathochromic shift than is produced by extensive twisting of unbridged derivs. about the central bonds. Mol. rigidity in the bridged Michler's Hydrol Blue results in an intense fluorescence which is greatly diminished by .alpha.-substituents.

IT **17717-35-0**, Ammonium, [7-(dimethylamino)-9,9-dimethyl-2(9H)-anthrylidene]dimethyl **17717-51-0**, Ammonium, [7-(dimethylamino)-9,9,10-trimethyl-2(9H)-anthrylidene]dimethyl
(ion, spectrum of)

RN 17717-35-0 HCAPLUS

CN Methanaminium, N-[7-(dimethylamino)-9,9-dimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)



RN 17717-51-0 HCAPLUS
CN Methanaminium, N-[7-(dimethylamino)-9,9,10-trimethyl-2(9H)-anthracenylidene]-N-methyl- (9CI) (CA INDEX NAME)